



**GEORGE RR
MARTIN**

**SONGS OF THE
APOCALYPSE**



**GREGORY KH
BRYANT**

**A BRIEF
HISTORY OF
AIRSHIPS**

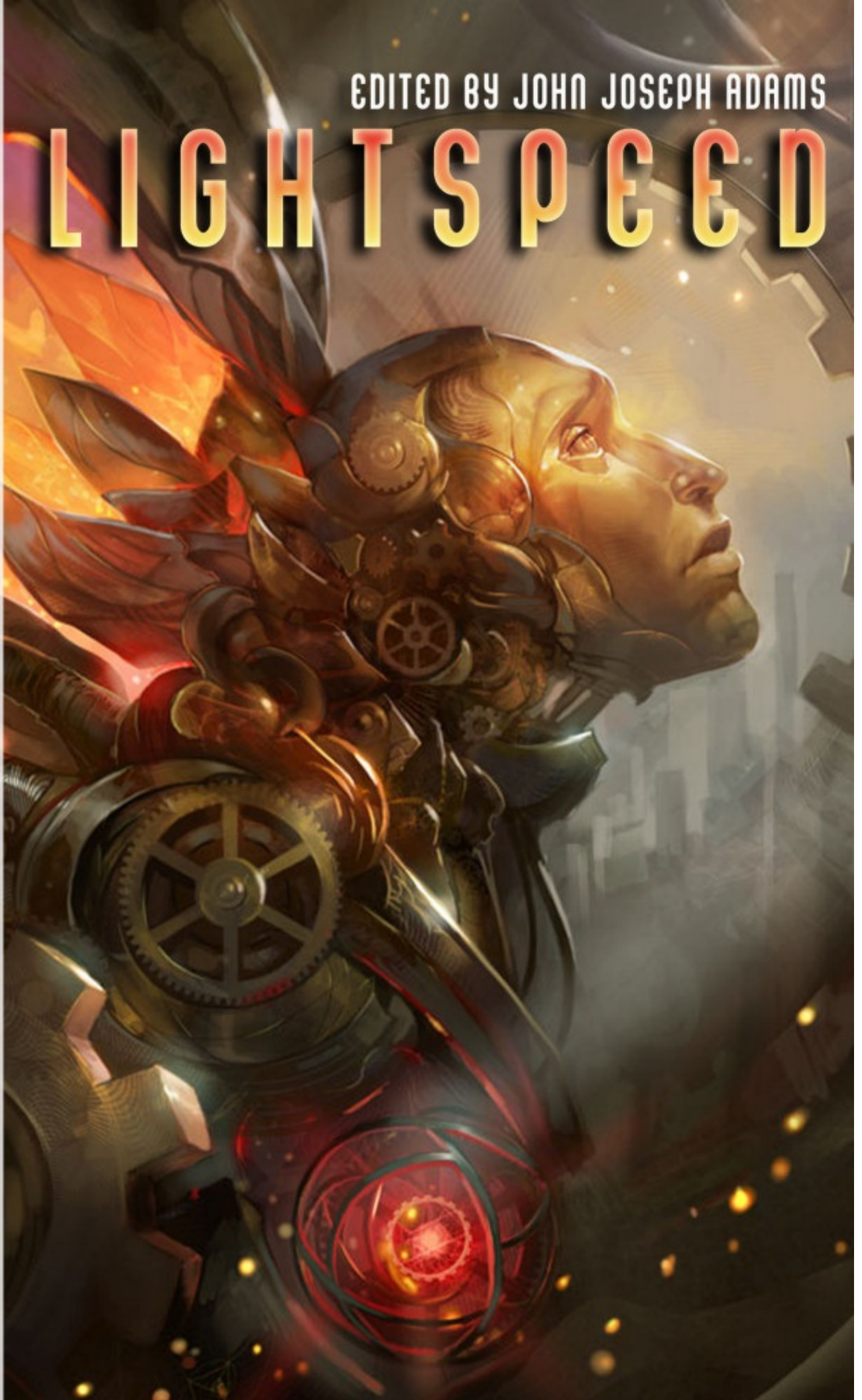


**THE LISPS
MUSIC IS
SCIENCE
FICTION**

**JULY
2010**

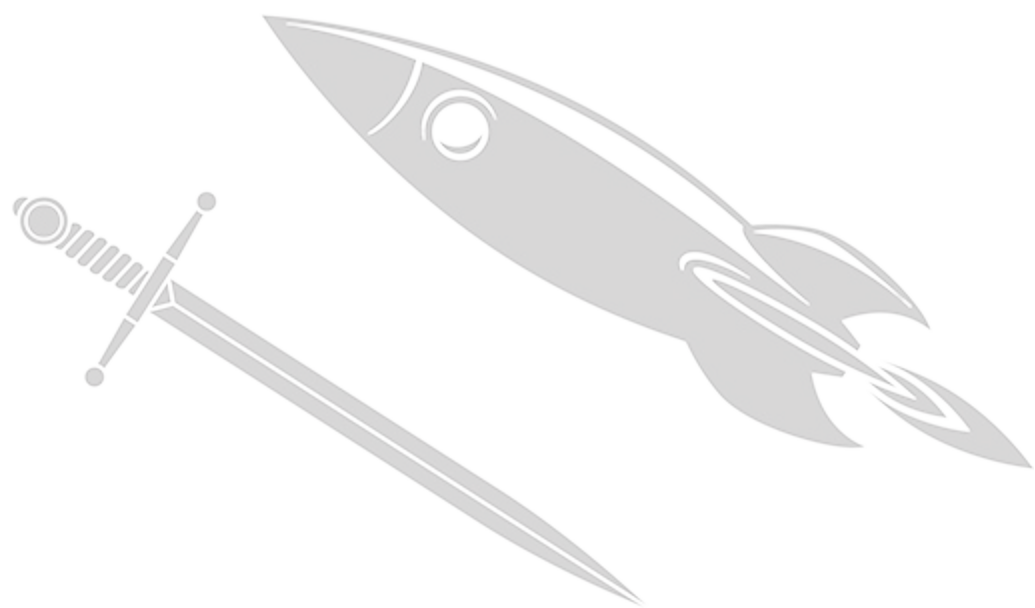
EDITED BY JOHN JOSEPH ADAMS

LIGHTSPEED



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SCIENCE FICTION & FANTASY



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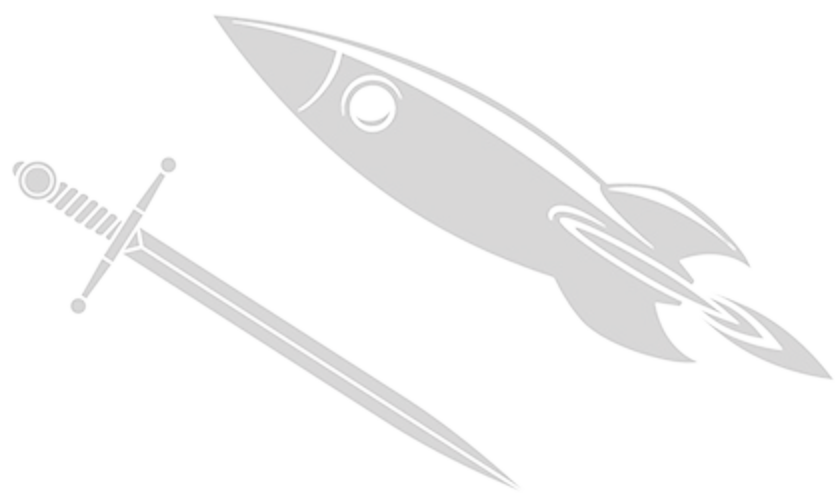
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FROM THE EDITOR



Foreword to Humble Bundle Edition

John Joseph Adams

Lightspeed is a digital science fiction and fantasy magazine. In its pages, you will find science fiction: from near-future, sociological soft SF, to far-future, star-spanning hard SF — and fantasy: from epic fantasy, sword-and-sorcery, and contemporary urban tales, to magical realism, science-fantasy, and folktales. No subject is off-limits, and we encourage our writers to take chances with their fiction and push the envelope.

Lightspeed is a 2014 Hugo Award Winner (and a four-time Hugo finalist), and stories from *Lightspeed* have been nominated for the Hugo Award, the Nebula Award, and the Theodore Sturgeon Award.

Edited by bestselling anthologist John Joseph Adams (i.e., me), every month *Lightspeed* brings you a mix of originals and reprints, and featuring a variety of authors — from the bestsellers and award-winners you already know to the best new voices you haven't heard of yet. When you read *Lightspeed*, it is our hope that you'll see where science fiction and fantasy comes from, where it is now, and where it's going.

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This issue was selected for inclusion in the “Apocalypse Bundle” for George R.R. Martin’s story “[... for a single yesterday](#),” which I point out in case you would like to jump right to it.

In this issue you will also find additional information about [other books](#) edited by me that you might enjoy, as well as a [special offer](#) for Humble Bundle readers that lets you get a free three-month subscription to *Lightspeed* and *Nightmare*.
Enjoy!



John Joseph Adams, in addition to serving as publisher and editor-in-chief of *Lightspeed*, is the series editor of *Best American Science Fiction & Fantasy*, published by Houghton Mifflin Harcourt. He is also the bestselling editor of many other anthologies, such as *The Mad Scientist’s Guide to World Domination*, *Armored*, *Brave New Worlds*, *Wastelands*, and *The Living Dead*. Recent and forthcoming projects include: *Help Fund My Robot Army!!! & Other Improbable Crowdfunding Projects*, *Robot Uprisings*, *Dead Man’s Hand*, *Operation Arcana*, *Wastelands 2*, *Press Start to Play*, and *The Apocalypse Triptych: The End is Nigh*, *The End is Now*, and *The End Has Come*. Called “the reigning king of the anthology world” by Barnes & Noble, John is a winner of the Hugo Award (for which he has been nominated eight times) and is a six-time World Fantasy Award finalist. John is also the editor and publisher of *Nightmare Magazine* and is a producer for Wired.com’s *The Geek’s Guide to the Galaxy* podcast. Find him on Twitter @johnjosephadams.

Editorial, July 2010

by John Joseph Adams

Welcome to issue number two of *Lightspeed*. Last month we debuted to an enthusiastic response from the science fiction community. There have been numerous comments here on our site, postings in the blogosphere, “likes” on Facebook, retweets on Twitter—and for that, we thank you. In our July issue, we’ve got a whole new slate of material for you, and we hope you’ll let us know what you think of our offerings this month as well.

In Carol Emshwiller’s “No Time Like the Present,” the residents of a small, economically-disadvantaged town are surprised by the sudden influx of oddly tall, oddly rich, oddly speaking people who appear out of nowhere and buy up all the prime real estate. And if you don’t think that sounds shoe-dad, well, *evolve* why don’t you?

Corporate slavery, retrograde amnesia, posthumanism, and kicking ass take center stage in “Manumission” by Tobias S. Buckell, the tale of a mercenary named Pepper who must rebel against those who would seek to control him.

Steampunk is the order of the day in “The Zeppelin Conductors’ Society Annual Gentlemen’s Ball” by Genevieve Valentine—an SFnal take on a subgenre more known for its flights of fantasy—featuring heliosis, 19th century ephemera, and, of course, airships.

And from bestselling author George R. R. Martin, we bring you “...For a Single Yesterday”—one of his lesser-known tales, but also one of his most powerful—which explores the value of memory, music, and drugs in the aftermath of an apocalypse.

On the nonfiction side of things this month, in addition to author spotlights on Genevieve Valentine and Tobias S. Buckell, we’ll be starting off on a humorous note with Carol Pinchefsky and the “Top Five Time Travel Nightmares” you might encounter should go for a swim in the timestream.

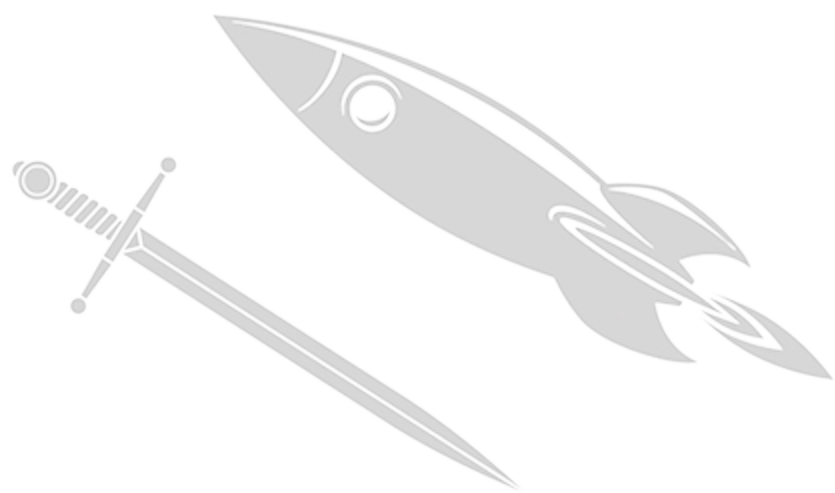
In “You Are the Person You Are Now,” Neurotopia’s Evil Monkey explains how memories work, the difference between retrograde and anterograde amnesia, and how you may be a new person from moment to moment.

Gregory K. H. Bryant, meanwhile, provides us with “A Brief History of Airships,” a primer on the history and evolution of dirigibles that explains how steerable, lighter-than-air craft progressed from some crackpot inventor’s dream to the elegant, Victorian technology of yesteryear.

And, finally, in “Music is Science Fiction,” we present an interview with indie rock band The Lisps, whose steampunk musical *Futurity* tells the story of two Civil War-era inventors who imagine a utopian future defined by an omnipotent machine that will end war once and for all.



SCIENCE FICTION



No Time Like the Present

by Carol Emshwiller

A lot of new rich people have moved into the best houses in town—those big ones up on the hill that overlook the lake. What with the depression, some of those houses have been on the market for a long time. They'd gotten pretty run down, but the new people all seem to have plenty of money and fixed them up right away. Added docks and decks and tall fences. It was our fathers, mine included, who did all the work for them. I asked my dad what their houses were like and he said, "Just like ours only richer."

As far as we know, none of those people have jobs. It's as if all the families are independently wealthy.

Those people look like us only not exactly. They're taller and skinnier and they're all blonds. They don't talk like us either. English does seem to be their native language, but it's an odd English. Their kids keep saying, "Shoe dad," and, "Bite the boot." They shout to each other to, "Evolve!"

At first their clothes were funny, too—the men had weird jackets with tight waists and their pants were too short. The girls and women actually wore longish wide skirts. They don't have those anymore. They must have seen right away how funny they looked compared to us, and gone to Penny's and got some normal clothes like ours.

They kept their odd shoes, though, like they couldn't

bear not to have them. (They look really soft, they're kind of square and the big toe is separate.) And they had to wait for their hair to grow out some before they could get haircuts like ours. This year our boys have longer hair than the girls, so their boys were all wrong.

Every single one of those new people, first thing, put two flamingos out on their front lawns, but then, a few days later, they wised up and took them away. It wasn't long before every single one of them had either a dog or a cat.

When Sunday came, they all went to the Unitarian church and the women wore the most ridiculous hats, but took them off as soon as they saw none of us wore any. They wore their best clothes, too, but only a few of us do.

Even though they come to church, Mom says I shouldn't make friends with their kids until we know more about them and I especially shouldn't visit any of their houses. She says the whole town doesn't trust them even though everybody has made money on them one way or another.

Their kids have a funny way of walking. Not *that* funny, actually, but as if they don't want anybody to talk to them, and as if they're better than we are—maybe just because they're taller. But we don't look *that* different. It seems as if they're pretending we're not here. Or maybe that *they're* not here. In school they eat lunch together at the very farthest table and bring their own food, like our cafeteria food isn't good enough. They obviously—all of them—don't want to be here.

I've got one of the new people in my class. I feel sorry for her. Marietta...Smith? (I'll bet. All those new people are Smiths and Joneses and Browns and Blacks.) She's tall and skinny like they all are. She's by herself in my class; usually there's two or three of them in each class. She's really scared. I tried to help her the first days—I thought she needed a girl friend really badly—but she didn't even smile back when I smiled straight at her.

The boys are all wondering if those new boys would be on the basketball team, but so far they don't even answer when they're asked. Jerry asked Huxley Jones, and Huxley said, under his breath, "Evolve, why don't you?"

Trouble is, my name is Smith, too, but it's *really* Smith. I've always wanted to change it to something more complicated. I'd rather be Karpinsky or Jespersion or Minnifee like some of the kids in my class.

I kind of understand those new kids. I have to eat a special diet, and I'm too tall, too. I tower over most of the town boys. And I'm an only child and I'm not at all popular. I don't care what Mom says, I don't see what harm there can be in helping Marietta and I'm curious. I like her odd accent. I try saying things as she does and I say, "Shoe Dad," to my dad even though I don't know what those kids mean by it. Maybe it's really *Shoo* Dad.

One of these days I'm going to sneak into her house and see what I can find out.

But I don't have a lot of time for finding out things

because I have to practice the violin so much. Funny though, when I took my violin to school because I had my lesson that afternoon. Marietta looked at the case as if she couldn't imagine what was in it. I said, "violin," even though she hadn't asked. And then she looked as if she wanted to ask, "What's a violin?"

Those kids are all so dumb about ordinary things. Every single one of them has been kept back a grade. I don't know how they can walk around looking so snooty. It's as if they think being dumb is better.

Marietta is awful in school, too. The teacher asked her who was the vice president and she didn't know. So the teacher asked who was president and she didn't know that either.

That gave me the courage to ask her if she wanted help. But then she said her mother doesn't want her to be friends with any of us and I said my mother says the exact same thing. Finally she laughs, we both do, and she says, "Shoe Dad, if we can keep it secret."

(Those kids never say "Okay.")

She says, "But I shouldn't be too smart either. We don't want anybody to notice us."

So far I don't think she has anything to worry about in that direction. I don't say that, though. What I say is, "You're getting noticed for the opposite reason. You need my help."

I'm really curious about her house, but she wouldn't dare invite me and I wouldn't dare go there. And she can't

come to my house because Mom would be horrified. Too bad they look a little bit different otherwise Mom would never know. So we mostly meet in the woods by the railroad tracks where the bums used to hide out back when there were bums. Mom doesn't like me to go there either. She thinks maybe there might still be bums around. Marietta and I always scope out the place first, not for bums, but because boys sometimes go there to smoke.

I discovered Marietta was so bad at math because she was used to writing out the problems in an entirely different way. Once I got that straightened out she got a lot better. But she said Huxley told her there was no need for her ever to know who was president here now. I said, "Why not?" She started to say it wasn't important but she stopped in the middle. Then she said, it was just that there were some things she wasn't going to bother knowing.

She tells me she really likes Judson Jesperson, but she says she's not supposed to go outside her own group. And me, I like Huxley Jones, but Marietta says he can't go outside their group either. She's supposed to like Huxley and I'm supposed to like Judd. I asked her if this was some sort of religious thing? I didn't dare say racial but Judson has very dark hair and eyes though his skin is just like hers. She said, no, it was something entirely different and she wasn't supposed to talk about it. She said it would be *very* dangerous for any of her group to marry outsiders. She said, "Who knows who would be president in a couple a hundred years if

Judd and I got married?”

So anyway, we're unhappy together and I can tell her all about Judson's family but she can't tell me anything about Huxley.

• • • •

A dozen more families of the tall people move into town. They can't take the best houses because they're already gone, but when they get through with the second best houses, they turn out to be almost as good except for not being on top of a hill and next to the lake.

The first group of kids is getting a little friendlier. Huxley even let himself get talked into being on the basketball team but he didn't know how to play and had to be taught from scratch. Judd says they're sorry now. All he has going for him is being tall.

I don't care, I like him. I like his stooped over posture. As if he doesn't want to be that tall. I like his kind of scholarly face. I like his pixie grin. At first he was always frowning at all of us, but pretty soon he wasn't and especially not at me.

The first thing I said to him was, "I like your name," and he actually did smile.

By now everybody is saying Shoe Dad.

• • • •

Then we have the first snow and a snow day. It's so

beautiful. I want to see Marietta right away, but no school so I start out towards her house. I'm not going to disobey Mom. Besides, that's our only good hill for sledding. Everybody will be up there.

And there everybody is, with sleds and garbage can lids and folded up cardboard boxes. Some kids even have skis. The new kids are even more excited about the snow than we are. They act as though they've never made snowmen and never thrown snow balls. They're like little kids. Well, actually we all are.

Those new kids have skis and fancy boots. But not a single one knows how to ski.

Marietta's there. I knew she would be. She says first off, "Look... these great boots...."

She has the fancy kind you can't walk around in. They're white with dozens of black buckles. I admit they're beautiful. I say, "Shoe Dad."

"...and they only cost five hundred dollars."

She's always saying things like that. Everything is cheap to her. I wish something was cheap to me. I'd like to say, "Evolve!" but I don't want to make her feel bad. I say, "Bite the...oh yeah, bite the *ski* boot."

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We don't hear about it till lunch time, but that night in the middle of the storm, odd things disappeared. Half the fish at the fish hatchery, and that very same night, a big pile of

lumber from the lumber mill disappeared. The night watchman swears he made his rounds every hour. Sometime between his two o'clock and three o'clock a whole section of lumber was gone and not a sound. The fish people are there early and late. They went to feed the fish at eight and found half the tanks empty. Some of us say the new people are getting blamed just because they're richer than we are and just because they're new, though nobody can figure out how they could have done it. Even so, I'm suspicious, too. Dad says the town is going to have a meeting about them.

Then we hear that exactly the same night, north of us, in Washington State they also lost a lot of lumber. And another place in Nevada lost half their grass-fed beef.

Funny though, Huxley said all this was *our* fault. Even that they're here in the first place is *our* fault. He said we should have stopped cutting down trees. He won't say anything more about it. That shows how odd these new kids are. But I guess that's fair, we blame them for everything and they blame us.

Except for Marietta, those kids still don't like it here at all, but Marietta says she's getting to like it, partly because of being friends with me—where she was before she never had such a good friend as I am—and she also likes it because she always did like camping out and making do with what's at hand. That makes me wonder all the more where she came from.

• • • •

The new people often have meetings in one of the larger houses up on the hill. They can't hide that because all the best cars in town are parked outside. After the fish and lumber disappear, the next time those cars gather, a whole batch of the town's people storm the house. It isn't fair, but the cops are on our side; they're just like all the town's people, they don't trust those new people either. And it isn't as if the new people had any higher up connections in the town that would help them. So the cops arrest *them* instead of *us*, even though we're the ones that broke into their meeting. Did a lot of damage, too, and not only to the furniture. Six of the new people are in the hospital.

That leaves a lot of those kids with nobody looking after them. The school principal asks the town parents if they'll take in some of the children temporarily until their parents can get themselves straightened out with the police. I get my folks to take in Marietta. Mom doesn't mind it under these circumstances. In fact she acts nice. She even bakes cookies. Marietta can't believe Mom made these right here at home. She's so fascinated she forgets to feel worried for a while.

As usual I have to practice the violin. Marietta tries it out. All she makes is squeaks. She can't believe how hard it is. She's only played computer instruments. "Aided," she says, so you don't have to know anything. But you can have any sound you want and you sound good right at the beginning.

I have twin beds in my room so we get to be right in together.

At first Marietta seems to like it as much as I do. We talk until Mom comes in and tells us we have to stop because of school tomorrow. But a little bit after I turn out the light, I'm pretty sure Marietta is crying. I ask if there's anything I can do.

She says, "I wish I could go home."

I say, "It won't be long before your parents come back."

"I mean I want to go back where we used to live. My real home."

"Where is it?"

"We're not supposed to say."

"Was it so much better there?"

"Sort of...some ways...except it's nice being so rich for a change. Of course there's lots you don't have.... Oh well."

"I'm glad you're here."

"Well, I'm glad for having you."

"Can I go up and see your house now that there's nobody there?"

"It's just like yours only richer. That's because everything is so cheap here otherwise we couldn't afford stuff. It's *supposed* to be just like yours. Our parents made it special to be like that."

"Can we go anyway? I like rich stuff and I hardly ever get to see rich things except on TV. Besides, don't you need to go get more clothes?"

• • • •

So we do that—skip school and go up. She’s right. There’s nothing odd about it...except there is. There’s a fancy barbeque thing in the backyard, but obviously never used. There’s a picnic table beside it but no chairs. The two flamingos are in a corner, lying on their sides. Inside it’s awfully—I don’t know how to describe it—cold and stiff, and kind of empty. It’s as if nobody lives there. There’s a *National Geographic* on one side of the coffee table and a *Consumers Report* on the other, and that’s *all*. No clutter. Mom would like it.

Upstairs, her room has all the right stuff. There’s a brand new teddy bear on the pillow and a small bookcase with brand new books, all very girly. They don’t look read either. There’s not a single Tarzan or John Carter. I ask, and she never even heard of Tarzan. I tell her I’ll lend her some. Even though we’re too old for those, she’ll like them.

She has one whole drawer with nothing but fancy sweaters and blouses. We gather some up to bring back and she says I can have half of them.

On the way out, I open the hall closet and there’s a tangle of wires and silvery things along them like Christmas tree lights. At first Marietta tries to keep the door shut as if she doesn’t want me to see them, but then she says she trusts me as much as anybody she ever knew so she says, “Take a good look.”

I say, “I don’t know what it is, anyway.”

She says, “Time machine,” and starts laughing hysterically. And then we both laugh so hard we fall on the floor and I don’t know what’s the truth and what isn’t, except maybe I do.

I’m glad we went there. I don’t need to feel jealous after all. Even though Mom would probably like living like that, I wouldn’t.

• • • •

The police hang on to those new people to see if any of them are guilty of anything at all and also as a sort of punishment, I suppose for being rich and taking up all the best places. That means Marietta and I have even more time together.

The lumber mill now has three night watchmen. They’re sitting right next to the biggest piles of lumber. The fish hatchery has people practically in with the fish.

But then—again in the middle of the night—all the new people disappear. The grown-ups, that is. So then we know who did the fish and lumber. But now there’s nobody to blame but their children. Some townspeople are so angry they want to put them in jail, too. Most of the townspeople don’t go that far, though. My parents and lots of others say they won’t let that happen. Besides, now that they know Marietta they like her.

But it’s not safe for the new kids to walk the streets

anymore—two kids got beat up by a gang of boys and they weren't even the new kids, they were just blond and tall and skinny. Mom dyes Marietta's hair black so she'll be safer. Some of the other new kids do that too.

Marietta looks good with dark hair. That doesn't cheer her up, though. All those kids feel terrible. Naturally. But it's odd, they keep saying they're not surprised, they just wondered when it would happen.

We talk a lot in bed at night and Mom doesn't tell us to shut up until it gets really late.

“How can your parents leave you like this?”

“We're not allowed to say, but it's for our own good.”

“Parents always say that.”

• • • •

I try to cheer up Marietta. We go to lots of movies. She does like the Tarzan and John Carter books and there are lots of those to go through yet. Mom gives her valerian and chamomile tea almost every night. At first Marietta didn't want hugs from my mom, but now she does.

I go around wearing her expensive sweaters and I wear her white jacket when she wears her shiny black one. That turns out to be a big mistake because I get taken for one of them. I'm as tall and skinny as they are. And here I am, wearing fancy clothes like they always do. And here we are, Marietta and me, one of us with dyed black hair and me, a darker blond than they are but that doesn't matter to this

bunch. They're not high school boys. I don't know who they are but they're grown men—waiting for us after the movie.

They don't think Marietta is one of the new people—they think *I* am. She's wearing my faded blue jeans and my sweatshirt and I'm in her cashmere sweater and that white jacket.

They push her aside—so hard they knock her down—and come after me. They yank at Marietta's jacket so hard the zipper breaks, and then pull the sweater up over my face so I don't see what happens next. All I know is they suddenly stop and Marietta is pulling the sweater down so I can see. She yells, "Run," and we do. When I look back I see all three of them collapsed on the ground.

"Don't stop." Marietta grabs my arm and pulls me along with her.

"What did you do?"

"I'm not allowed to say."

We run all the way home and collapse in our front hall. That white jacket is lost and ruined out there somewhere and the sweater is all pulled out of shape.

Marietta right away says, "Don't tell."

"How did you do that?"

"I thought you had those here. Tazers. Don't you? This is just a different form."

"Where is your tazer?"

"I'm not supposed to say. See, where I come from it's not safe anymore since the revolt of.... My drones—I mean

my parents—they wanted me to be able to defend myself. Besides, they thought everybody here had guns.”

“Where is it? You can tell me.”

“Here.” She points to her earlobe. (There’s not even a mark that I can see.) “I have some control over the direction.” She twists her earlobe. “I can even point it back.”

I touch it, but I don’t feel anything.

“They left us here, my drones. They said they would if anything happened. And things did happen. I guess it *is* better here. I mean the air and water and space to move around in.... And the food...it isn’t what we’re used to, and it’s awfully primitive, everything is, but it’s better some ways and we’re rich. I have a million dollars in the bank in my name.”

She’s about to tell me more but Mom comes in right then and finds us sitting on the floor, and me, all bedraggled and the sweater ruined. She gets really upset when she hears about it. (We don’t tell her the tazer part.) She insists that she’s going to dye my hair that very night no matter how long it takes, and I have to stop wearing Marietta’s nice clothes.

For once I agree with her. I let her do all that, even though I know the kids at school will tease me.

I wonder if those men are going to tell what happened to them? Maybe not, though, because they were breaking the law.

I’m going to stick close to Marietta from now on. I feel safe with her.

Most of those new kids are physically awkward—like

Huxley trying to be on the basketball team—but Marietta isn't so bad. She says it's because her parents didn't believe in the education boxes most kids had. She says those were like being inside a TV set. But she kept calling hers "Mommy" by mistake and that upset her mother so much she actually had her playing outside even though the air wasn't that good anymore and even when it was too hot.

She's been telling me everything, even about the air-conditioned sweater her mom got her.

She says, "Even so, it was getting worse and worse. Food riots sometimes. I know this is best for us. But we have to be so careful and not change anything. Nobody knows what would happen if we upset things. Shoe Dad, I might not even exist. I'd go *poof!* Just like that."

• • • •

And then Huxley gets in trouble and that changes everything. He didn't dye his hair like the others did. It might not have worked anyway. Three men attack him; maybe the same three that came after us. (You'd think they'd learn.) Marietta and I have to guess what happened: that he not only used his tazer, but tied up the men when they were down. Dragged them into the woods. Then he walked all the way home with bruises all over. Nobody found out about the men out in the woods till two days later. It rained all the next day and one of the men suffocated with his head in the mud. Marietta and I know Huxley didn't use his tazer until he was

practically all beat up. He was trying so hard not to cause any changes in the people living here but then he caused more of a problem.

The townspeople are blaming him. Of course they are. Besides, who knows what story those men told? So the police come to arrest him, but he takes off. They even shoot at him, but he gets away. We don't know if he got shot or not.

All the new kids are even scarer than they already were. About going "poof." They keep saying, "It's gotta be even worse than that butterfly back in the Jurassic era." I don't know what they mean by that.

They stand there staring at nothing, as if thinking: Any minute and I never existed. They stop in mid sentence as if: Is it right now that I disappear?

On the other hand, they could disappear by going back home. We'd never know which it was. Marietta hangs on to me whenever she can. It's as if she thinks as long as she has a good grip on my arm, she won't disappear. It's a bother but I let her.

• • • •

I know where Huxley isn't. He's not at that place where the bums used to go and where the boys go to smoke. That's too easy. But I do know where he could be. I don't even tell Marietta. I get up real early before anybody is up. I make a couple of peanut butter sandwiches and take some nuts and apples and go. Good that Huxley and I never got together or

the cops would be watching me.

So I head out into the woods. It's a good place to get lost since there are so many crisscrossing paths and there's a lot of undergrowth for hiding. I think Huxley is somewhere in there but I'll have a hard time finding him. I whistle. I sing. I make a lot of noise and wander all over. I think I'm going to get lost myself.

But what if he's disappeared already? What if he's never been at all?

Then I hear a bird chirping above me, I look up and there he is and he's not been shot. I climb up and give him the sandwiches. He's changed a lot from when he first came. I don't think he'd have been able to climb a tree. He looks kind of wild and haunted and dirty. That makes me like him all the more. I'm always embarrassed, being so close to a boy I like so much, and now even more so. I don't ask anything I really want to. I'm too nervous.

He gobbles up both sandwiches and apples and nuts all in about five minutes. When everything is gone he thinks maybe one of the sandwiches might have been for me and apologizes. But I say none of it was for me and I'll bring more tomorrow.

He admires my new black hair, but I think he's just trying to be nice.

I move up closer to the branch he's on. Turns out I don't have to ask anything. He tells me he always did like me but didn't dare show it. Now he does dare. He thinks everything

is all messed up anyway so he might as well like me and he wants me to know it.

Then we hear the swishing of underbrush and voices of people coming closer.

We shut up. He moves higher and I move lower.

In a few minutes the woods are packed with people walking all over the place looking for him. Some of them are cops in uniform. Lots are just townspeople. Mostly men but a few women.

I jump down and move away from his tree. I shout, "Let's look over by the little cave next to the stream." So I and a group of others including one cop, head over there.

The cop says, "Aren't you supposed to be in school?"

"Yeah, but isn't this important?"

"You're lucky I'm not a truant officer."

"What will you do when you find him?"

He pulls his cuffs out of his back pocket and rattles them. Says, "He's dangerous."

• • • •

I know this whole woods better than a lot of them do. I lead them around to all sorts of good hiding places. I talk loud and make a lot of noise. I don't ever look up.

It's a tiring day for everybody. I had no idea I was going to get caught up in the search and get home so late. My folks and Marietta have been worried about me. I didn't tell Mom where I'd been, but I tell Marietta. She feels bad that I didn't

ask her to come along, but I convinced her it was safer for Huxley if it's just me.

• • • •

Next day I don't think I should keep on skipping school so I just skip my last class. This time I make four peanut butter sandwiches. It's late so I bring a flashlight.

I head for that same tree first, but he's not there. As before, I sing. I whistle. I keep looking up and chirping. I go to all the good spots. It gets dark and I'm worried about using the flashlight. There's only a little moon so I stumble around tripping on things.

Pretty soon I know I'd better go home. I leave the sandwiches up in the tree where I first found Huxley. I leave the flashlight for him, too, and try to find my way out without it.

But I can't. I thought if I just came to one of the streams and followed it, I'd be okay, but it's muddy and slippery near the stream and I keep falling down. I decide it's best to just wait till dawn. I huddle down against a tree. I wish I'd kept one of those sandwiches for myself.

In the morning I go back to the tree where I left the sandwiches. Something got into them and ate most of them and scattered what was left all over.

• • • •

When I get back my folks are so worried and the police are all over looking for me. Thing is, Marietta disappeared, too, and first they thought we were off somewhere together. Then they thought that I got disappeared with all the others.

It turns out they're *all* gone. I'll never know if Marietta got to go home or if she never existed in the first place or maybe they decided it was a bad and dangerous idea to leave their kids here. Or maybe things got better so it was okay to go home. Or maybe they found better stuff from other times. Like way, way back before there were other people to get in their way.

She left a lot of her clothes in my room. Funny though, my old Tarzan and John Carter books—the ones she was in the middle of reading—are gone. That makes me feel that she didn't disappear completely like she was afraid would happen. She's still someplace, I'm sure of it, reading my books.

I wonder if I could write her a letter. I'll bet there is a way, like sealed up in stainless steel. I wish we'd talked about that before she left. I wish I knew how long my letter would have to last to get to her. Maybe I'll have to carve it in stone.



Carol Emshwiller grew up in Michigan and in France. She lives in New York City in the winter and in Bishop, CA in the summer. She's been doing only short stories lately. A new one will appear in *Asimov's* soon. She's wondering if she's too old to start a novel but if a good idea came along she might do it anyway. PS Publishing is publishing two of her short story collections in a single volume (sort like an Ace Double), with her anti-war stories on one side and other stories on the other.

Manumission

by Tobias S. Buckell

This morning, when you wake up and look at your rippled reflection in the basin of water near the concrete wall of your cell, you only have one true personal memory left. It can't be that your entire life is based off this one event, so you suspect they've left it with you to piss you off. To 'motivate' you. To make you one raging motherfucker.

It's a riff on the Countee Cullen poem. You're six, standing on the street holding the anonymous arm of your mom, and the other kid staring back at you flips you off and calls you nigger.

That's all they really left you with.

Sure there's other stuff, you're no vegetable. You can use money, eat, walk, tap the net, and know just about anything headlined over the last thirty years. But anything specific is faded, general, lost behind static and fuzzy feelings.

You empty the basin with a flourish and look around your cell.

The headache, the all-over itching, the scars crisscrossing your entire body, that gets to you too.

You've signed yourself away, the men in the black suits have explained back when you first arrived in this cell. They sat across from you on a sterile metal table. The document they slid toward your burnt smooth fingertips is legit.

So you listened to them, and nodded, and they got up to leave.

Oh yeah, one last thing, they had said.

Your name.

Pepper.

And your last name?

They just chuckled and closed the door.

• • • •

Nine o'clock. Newport, Rhode Island. A forest of masts bobs slightly, boats cheerfully tied at their docks. You slide off the blue awning over the side entrance to a small bar and hit the slippery cobblestones to face a portly middle-aged accountant with slicked back wiry hair.

“Oh shit...” is all he has time to say.

Then slumps.

The small wires that knocked him out recoil back up into your wrists with a flick. You squat over the man, push his trousers up his hairy calf, and look at the tattoo on the back of his knee. He's ShinnCo property. Your eyes scan for forgery, defects, get in closer for a finer look, where every hair seems to be tree-sized.

All good. You blink your eyes until they return to normal, the thin extra membrane rolling back behind your eyelids.

His hands are clammy when you grab them. His breath reeks of alcohol. With a grunt you pull him up onto your

shoulder and stagger toward a waiting car.

What, you wonder, has Mr. James Edward leaked to the Federalists? You really don't want, or need, to know.

Twelve hours later, five thousand closer to freedom, an old 6.35mm Astra Model Cub pistol tucked in the inner pocket of your oilskin duster, you're sitting in the lounge of an airship over several hundred feet of water, languorously easing your way toward the next stop, Eleytheria.

It's moored out in the Atlantic off the Eastern Seaboard this month.

• • • •

At street level the Gulf Stream winds kick through the downtown buildings of Eleytheria. Your oilskin duster takes on a life of its own, bucking, trying to pull you off course as you make the usual staggered path, random jigs, sudden stops in front of reflective surfaces. It's not even a conscious thing, checking for tails.

Monotone pedestrians in business camouflage, the grays and blacks of their seemingly timeless and conservative professions, mill past you.

It isn't New York, but any of them could have been plucked out and placed in that environment without even noticing. No, just a few miles away the salt clears the breakwalls in clouds of mist and hovers into downtown.

Eleytheria is a giant bowl riding the large open ocean. Free to go where it pleases. Do what it pleases.

Many things start in Eleytheria.

Like yourself, years ago, deep in the bowels of one of Eleytheria's denizen companies. You've found old archived public camera pictures of yourself walking down the streets, into the center of ShinnCo, to sign your self, this self, into what you know now.

Sometimes you hate your old self for selling you into this bondage. You wonder what he got? Lots of money? Some last great fling? Or were you just desperate, a wandering piece of hardware abandoned by some former First World secret gov project made obsolete by the Pacification?

You'd like to think you did it for some great cause, like helping your family out of a dire situation. But late at night you doubt it and think there was some stupid, selfish reason for doing it.

They'll never tell you. Because if it was something like a family, you might try to contact them.

No. They have your memories. You'll get them back when you serve your contract.

It always comes back to Eleytheria. When your feet hit the seacreate, your nose fills with misted salt, and you have returned to the only home you know. All your recent memories, everything that is you, starts here. Ever since you woke up behind a garbage dump in the back alley of ShinnCo.

And they've never let you back in through the front doors because they know full well what kind of monster they

created. They control you, but they don't sleep well at night. If you were to ever get near a door the automated security would hit you with an EMP pulse that would pretty much liquefy the machines in you, then the guns would reduce you to bloodied ribbons of flesh.

You won't be getting your memories back using the new skills they've grafted into you. No way. And they still have one final trick, to keep you close, to control you.

So you stand in front of a small food cart. A faded orange umbrella hangs limply over it. When you palm the metal rail, the countdown inside you resets. You're allowed to live for another week. A pointed way of letting you know you're motherfucking *owned*, and you don't get to stray. At all.

The edges of the umbrella flutter in the cold breeze, and on the other side of the cart an old Greek stands up.

“Morning Kouroupas.”

“Morning, Pepper,” he says, looking you up and down. “The usual?”

“The usual.”

The front of the cart has a faded poster of a model with a strained smile, flat white teeth, holding up a gyro in perfectly manicured hands. They're ‘heeeeros’ she says.

“Lettuces, mayonnaises...” Kouroupas' crazy white hair flies all over the place in the wind. It makes him look like a mad scientist.

He slaps the flatbread down. A cloud of flour tickles

your nose.

A few browned strips of meat, some folded metallic paper, and you have your gyro, along with a small napkin neatly slid between your fingers.

You look at it, your eyes adjusting to the fibers, mapping out a pattern along the embroidered edges, translating the woven picture into words.

Susan Stamm. Ten thousand. Location. Eleytheria.

Ten thousand closer to getting yourself back. To freedom.

And she's *right here*.

You fold the napkin and its encrypted directions into your pocket, pick up the gyro. Kouroupas smiles.

“Good day,” he tells you. “Be careful.”

You nod and slide a few bills over to him.

“You too.”

Be careful. It's the first time Kouroupas seems to acknowledge that this isn't just a gyro purchase. Seems to be telling you something's not quite normal this time.

Out of sight of the gyro stand you toss the gyro into a trashcan that thanks you and trundles away.

Not nearly enough raw sugars in gyros for you. Takes too long to metabolize. What you need now is something to spike your blood sugar to combat levels.

• • • •

Susan Stamm has done many, many unique things to

hide her presence. But she's on the run and wants off the planet. To do that she has to come to Eleytheria. Once an hour, every hour, a capsule is launched into low Earth orbit.

To really get far away, Stamm has to get Out There from Down Here.

So you sit and flip through pictures of embarkees who've been photographed at all three entrance points. One by fucking one. And these are just the ones the Port Authority computers have served up as possible matches. ShinnCo is being very generous with info and resources right now. They really want her back.

You're sitting in a small outdoor café, eyes closed. On the right eyeball is Susan Stamm's corp ID photo. On your left is some random face pic snapped by the Port Authority entrance machine.

Then another random face.

You reach for the sugary soda, take a long cold sip, and the next picture comes up.

Another sip of sugar water. Gotta keep the machines inside you running happy.

You flip to another pic.

Ha.

She looks thinner than the last official photo. She's still five-nine, but now has a recently bobbed haircut and green eyes.

• • • •

Four hours later you're in the lobby of a smaller Eleytheria hotel, looking up at the atrium eighty stories above you, licking the icing off a Danish. In the background, over the hum of people, over the echoing shouts of kids screaming and waving from several floors above, comes the explosive whip-crack of a capsule being thrown into space.

• • • •

There was this mugger that jumped you a year ago. Before you even realized it you'd spun, broke both his arms and a leg, and the man lay in an unconscious heap by the side of a brick façade.

His clothes were ragged, he was thin, and when you held his gun in your hand, you realized that it was unloaded.

Ballsy. And pathetic.

By going through his wallet you found out that his name was Jack Connely. He had three kids and a very attractive blonde wife. Jack had been a spacer entrepreneur of some sort, reduced to Earth living after the Pacification.

Now all the businesses could buy a ride into space. Move their offices up into alien stations, use alien services, buy alien products, machines. Not much use for small guys, you could hardly scrape together the price. But multinationals can, and now that they're all in orbit, or beyond, the pretense of even caring about the world they originated from was thrown out.

You could have used the money you found in his pocket,

his day's take, though you couldn't use it toward paying off your ShinnCo contract. They only accept their own in house credit.

You couldn't even use the money to disable the shit laced all through your body. You tried that once before. Almost killed you on the table.

Instead, you sent his wallet and the money back in the mail to his family. And you added some of your own.

You're a good person, you tell yourself.

But it's very hard to believe when it was so easy, so automatic, to have grabbed that man's gun and pull the trigger, right down to within a hairtrigger of firing, before stopping.

That can't be *all* wired into you, right?

• • • •

Susan Stamm walks through the revolving door, past a doorman, and on toward a cab. You shake your shoulders and arms, loosening up the great mass of coat around you, and step in behind her. She's better looking in person, unlike some of the dolled-up, make-up-caked women you've seen in the past.

As she grabs the gullwing door of the bubbly autocab she spots your reflection in the window and turns around.

"Could we share this ride?" you say. Already you flex the muscles in your wrists, begin to raise your left arm and coat to obscure her body. She'll fall, and you'll sweep her up

and into the autocab with you.

As the autocab rides off you'll look like two lovers cuddling in the back.

Instead her eyes widen, hands curl into fists, and a small dart burrows into your stomach.

You're on the ground, convulsing. Spit flecks your lips. You break into a heavy sweat. Vomit tastes like sugar water, flowing out onto the concrete sidewalk. It takes effort just to slowly roll over.

The doorman turns around.

He moves, a blur that you know isn't natural, and hits Stamm from the side. She hits the door of the autocab, shattering the Plexiglas, and the doorman grabs her neck, turning her head to confirm her ShinnCo tattoo.

Small silver fans protrude from the back of the man's neck. Antenna. You can see heat rising off his uniform, rippling the air around him. A timeshare. Not under his own control then—just renting his body for sudden on-the-spot jobs like this one.

You have a choice. Give it up. Let this competitor grab her, kill her, whatever.

Or.

With just a quick flex of your arms the wires spit out of your wrists and hit the back of his neck. The man spasms, lightning sparking across the surface of his skin. The antenna melt, dripping down the back of his collar. He spins around and raises his arms.

“Oh fuck,” he screams, the link to whatever controls him from orbit gone. “I’m burning. They killed me! I’m burning!”

As he staggers toward the door, people gather. Someone tries to get the doorman to sit down. Someone 911s to call this in, speaking into his pinkie finger.

On your hands and knees, eyes burning and streaming tears, wires retracted back into your wrists, you push forward into the car. You grab Stamm, pull her in with you, and barely manage to shut the door.

She’s in better shape than you, coming back to consciousness as you vomit sugar water all over her red high heels.

“Drive, damnit,” she shouts at the cab’s autopilot, and gives an address.

“Damage has been detected,” it warbles. “Failure mode initiated. A replacement cab is on its way. We apologize for the delay.”

“Shit.”

The cab rocks as she leans forward.

Your muscles fail.

Your brain goes zero.

You’re out.

• • • •

There are rooms and then there are rooms. They’re square more often than not, with white walls. But this one has dirty laundry, fake wooden paneling, a giant mirror on a wall,

and a small cot that you're lying on.

A wicker chair next to you creaks. Soft hands stroke your forehead.

"You're tough. That was supposed to kill you."

"I feel like shit." Every pore hurts.

"I would imagine." A finger traces the scars all over your body. "I'm sorry. I think I may have got the wrong person. It was the doorman I should have shot, he was the one coming for me. Who are you?"

Don't say anything.

Just shiver and turn back off. It's easier.

• • • •

You wake up hungry and naked. Disoriented. You have no internal time. The small set of numbers that usually hover in the corner of your left eye is gone.

There's a pink bathrobe on the wicker chair that you grab as you sit up.

It takes everything you have to stand. Muscles protest, and every cell seems to ache.

"Feeling better?"

She's sitting by the kitchen counter, hands up, watching you warily.

You nod.

"Okay. So here are the rules. Any sudden moves I fire another one of these pips into you. If your hands aren't where I can see them, I shoot. I doubt you survive another one. So

sit. Put your hands on your lap.”

The bathrobe is comfortable. You slowly wrap it tighter around you and sit. Her tone drips with suspicion, guarded overtones. The air is tense.

She points at your leg. That’s where they tattooed the small logo on you. Inner thigh. It really, really hurt.

“You’re ShinnCo.”

“Yes.” She knows, you know. No point in denying.

“And the doorman?” she asks. “Did you know about him ahead of time?”

You shrug.

She stares at you and you stare right back, not sure where this is going. You have the faintest sense that you’ll get out of the door alive.

“Why are you still here?” you ask, which also implies, *why am I still alive?* “You could have left me here.”

Stamm smiles.

“I felt bad for you.”

That is not the response you really expected. And you don’t believe it for a second. Someone this dangerous isn’t that stupid.

“You know what I am...”

“Get real. They want me alive. You’re not that dangerous. Neither was the doorman, he was just a backup. It’s unfortunate they don’t care a whit about his life.”

You’ve never spotted backups of any sort before. This is different. Very different. She spots the frown.

“Is this your first high profile recapture?” Off in the distance is the whipcrack of another space launch, and she smiles. It’s a broad one, full of glee. “Look, I’m within *walking* distance of getting away. They’re getting desperate. I shouldn’t have gotten this far. You’re a backup, the doorman was an emergency backup, and the first three they sent after me are all lying in alleys somewhere.”

She’s dangerous.

Kouroupas tried to warn you.

“So what now?” you ask.

“Well I’m hungry and making some breakfast. Can I get you anything?”

You smile.

“Anything with sugar, I could really use something sweet.”

She nods.

“Yeah, I’ll bet you could, but I know what makes you tick.” Your smile drops. “None of that for you. I’m leaving you weak, and slow for now. Just stay on the bed, don’t move, and I’ll bring you some diet soda.”

You stare at her, and she laughs at you.

“I know a lot about those systems in you. How do you think I ended up with those little pips I hit you with? I designed them myself.”

She walks into the kitchen, opens the fridge, and tosses you a can.

“Drink up... what is your name?”

You look down at the sugarless drink in your hands.
“Pepper,” you say.

• • • •

Susan Stamm. ShinnCo property since birth. Mother died having her, orphanage signed Susan over. She starts telling you all this stuff as she sits at a small table across from you and eats obscene amounts of breakfast sausage and eggs. The place reeks of it.

“You never even realize there is a different way of life,” Susan says. “But I remember, when I was twelve, suddenly understanding that there were people who didn’t have to have logos on their bodies, who didn’t have to report into minders once a day, who weren’t being encouraged to study certain things that the company needed.” She picks up a greasy link, pauses. “And then I decided I would escape it.”

“How many years has that been?”

She flashes a smile and downs the sausage.

Then the dishes are tossed in the sink, she washes her hands while looking over her shoulder at you. You’re still sitting in the pink bathrobe, sipping from the can.

“Just on the other side of Eleytheria is a launcher. I have a ticket off this world, and out there I have passage far out as crew on a mining ship. I know it won’t be easier, but I’ll be my own person.” She raises a wrist. “I can burn this fucking logo off my skin.”

“So you’ll leave me here?”

She shakes her head.

“I have a proposition. You can’t buy your freedom from ShinnCo, I’ll bet, not for a long time yet. But what would you do for a ticket offworld?”

You just stare at her.

She takes it as hesitation.

“You owe me your life anyway. I need someone at my back, because if it’s just me they’ll try and pick me up at the gates to the launcher. Last ditch, overwhelming numbers.”

“Okay.” Opportunity glints in your eyes. At any point along this journey you may have an opportunity to overpower her. She spots the reaction. She thinks she has you.

“You’ll walk me to the launcher, then I’ll hand over the ticket. Try to double cross me before then and I’ll fire another one of these nasty little critters into you. So it’s in your best interests to work with me.”

You nod.

She laughs.

“You realize you’re free, don’t you? You weren’t just physically disabled,” she says. “I scrubbed clean all your systems. You understand what that means?”

You test everything she has just said, and she is right. But...

When you look down to your wrists she steps back slightly. It’s an unconscious move.

“Those still work,” she says. “They’re bio-mechanical. Nothing that can be scrambled, infected, or shut down.”

For the briefest flash of a moment you've seen freedom. And then, you think to yourself, there is the matter of the countdown. That's firewalled off from the rest of your body and bio-mech. You can't see the countdown, but you know it's there. You don't explain this to her. Right now she thinks you're in her debt.

Play along.

"I've set you free from them," she says. "You can do anything you want now."

You nod again. "Okay, fair enough. I'll help you for the ticket. Can I have my clothes back?"

The smile on her lips fades. She sizes you up, squinting. Apparently something satisfies her.

"Other side of the bed."

They've been washed, pressed, and folded into a neat pile. The Astra Model Cub pistol lies on top of them all. It's loaded.

Golden. Like that tantalizing glimpse of freedom she'd tried to give you.

• • • •

Fifteen minutes later you're both out the door. You've got the overcoat draped over your right arm. You're weak, tired, and at a disadvantage, but all it will take is one well-placed shot where you can drop behind some cover, and she's down.

Susan faces you as she locks the door, still wary, but

there is joy in her face. She can see the end of the road.

It's almost sad.

You walk down a corridor toward a pair of steel doors. As sunlight spills into the dimly lit area, you scope a vending niche just ahead and to the right. A drink machine hums a long low note. All you have to do is slow down, just get behind her by one step, shoot her, and use the machine for cover if she tries to use one of those lethal darts.

Two shadows force their way through the doors at the end of the corridor.

The gun's easy enough to spot; you duck and jump to your side. Susan fires at one of them as you dodge into the niche.

What puzzles you is the wrenching pain in your shoulder that drops you to the floor in front of the neon glow of the soda machine.

They're not aiming at Susan.

That was meant for you.

Your chest is wet with blood and your left arm can hardly move, but with your right you feel around the inside of your overcoat as Susan falls to the ground. Unconscious, not dead.

You drape the coat over the good arm to hide the Astra and wait.

It's Kouroupas that turns the corner. His wild hair makes a halo around his head, bathed and filtered in the light of a flickering fluorescent overhead. There is no waiting, he

looks down at the overcoat hanging over your right arm, hesitates for a second, and you fire four times in a row, blowing a hole in the overcoat that the muzzle sticks through.

“Damn it.” Kouropas looks shocked as he slumps to the ground.

You crawl over to him and lean close.

There are no last words, no apologies or explanations, just his creased eyes looking up at the ceiling, his flour covered hands holding his bloody stomach, and then he stops breathing.

With some effort you retrieve his gun, pocket it with your Astra, and slump with your back against the soda machine.

• • • •

Fifteen sodas later you shake Susan awake again. The first time you tried, after plucking the feathered dart out of her neck, she just lolled back into unconsciousness.

Your shoulder is packed with a shirt torn off the anonymous, dead, would-be assassin at the far end of the corner. You're still seeping blood.

“Come on,” you whisper to her. “You need to wake up.” Her eyes snap open.

“No!” she shouts, throwing her hands up in front of her. You grab her wrists, a quick snapping motion, and look at her. She thinks she's been captured and been taken back to ShinnCo.

“You’re okay, you’re still here in the lobby. You got one of them first, I got the other.”

She looks at you, then calms.

You’re keyed up, your body’s retooling itself, parts coming back online. She’d given you an out, a way to leave. Your body, deactivated, could have been worked over by any shitty street surgeon. There was the slightest chance you could have found a way to be free eventually, thanks to her trick.

Now the insulin is surging, the blood sugar’s up, and the teenies in your blood scurry around, revived and back to business.

You’re back. Rebooted. Tiny emergency warnings flash in your vision, detailing the damage done to your shoulder. It numbs itself and the bleeding clots and stops.

Susan hardly protests as you pick her up off the ground by her wrists with one arm.

“Do you still have time to make your launch?”

She’s dazed, but focuses.

“Yeah. Yeah. We need to move.”

Gun in hand, the other shoved in a pocket so you don’t move it, you sweep the area ahead. Nothing stops the two of you.

• • • •

In the cab she asks you why you stayed with her.

You sit there, adjusting the bloodied shoulder bandage, and avoid her gaze.

“They came at me first,” you explain. “I’m a target now.” ShinnCo has spent too much time up in orbit, not enough time on the ground. You are just ants, resources to be used. And in their eyes you’ve turned on them, bitten them. It’s easier to eliminate you and find a new worker of your talents than risk something going bad. You’ve seen it before. No doubt you’ll see it again. “What good is bringing you in if they’re going to shoot me as I try to do it?”

“You could still have just left me there.”

True.

You wrap your coat back around you and look up at her. “I owed you one.”

The cab bumbles on down the road while you both sit in silence for a while. Then she puts a hand on your knee.

“You rebooted. I can fix you again, so you’re free of all their machines.”

You look down at her hand.

“Take too long. You have a launch.”

“Yeah.” She pulls back away, crosses her arms over her chest, and looks out the window. “I’m sorry.”

“Don’t be,” you say. “Your trick probably wouldn’t have worked anyway.” And you tell her about the ticking bomb in you, the nano flechettes timed to go off unless they get their little code from that contact on the gyro stand.

We own you motherfucker.

“They aimed at me first,” you tell her. Kouroupas came to finish it, and they’ll get to aim at you again when you have

to go back there to the cart in three days. Or you'll be sitting, standing, somewhere, when the bomb goes off. You'll look normal for a while, to bystanders, until your body falls down in a shapeless mass. Shredded from the inside out.

“That’s why I rebooted.”

You look out the window now as well, watching the terminals approach.

There isn't much to say after that.

• • • •

There are some things you know about memory technology.

One is that it began here on Earth. Using existing technology: superconducting quantum interferometer devices that map specific memory recalls. It was pretty much there when the Pacification happened. With alien technology brought down out of orbit it got nudged along just a little further into maturity.

Two. The memories are burned out of your head. They aren't coming back.

Three. The same alien technology that matured memory alteration allows backups.

Four. When you figure out how to disable the bomb inside you, you will then go out and find that backup.

If there is no backup, there will be payback.

• • • •

You walk Susan up to the terminal booth. Several streets behind lay the bodies of more dead ShinnCo who tried to stop you. You stand on neutral ground. Even ShinnCo wouldn't piss off the alien launch corporation that owns Eleytheria. Overhead the floors sweep out over the road like wings. The architecture is impossible, like Frank Lloyd Wright on crack. The supports are too small. The wings too large. It's a building designed by something that evolved on a lower gravity world and is forcing their sensibilities onto an Earth object.

The inside of the booth is filled with a light pink gas of some sort. It's more than bulletproof; any hostile action you could take would result in vaporization.

Alien ticket takers don't put up with shit. Too many Earth terrorists tried to take out their aggression on them in retaliation for the Pacification. The orbital corporations that own the rest of the solar system found it annoying, so they put in countermeasures.

Susan scans her ticket in.

Inside the booth, tentacles move. Half of them are plugged into the wall, the other half seem to support a globular mass. This creature looks like a cyborg octopus. It's light years from home, trying to scrape out a living in a weird world, looking out at you with three eyes at the center of its trunk and burbling something.

"Clear. Proceed," the speaker orders.

The security gate to the right of the booth slides aside.

Susan turns to you. She slides an extra ticket into the palm of your hand.

“In case it ever works out...” she says.

You wonder if the memory of her walking through the security gate, or the memory of her hand sliding away from yours, could easily be burned out of your head.

Not this time at least.

Several minutes later the capsule thunders out in the great above and the thing in the booth hisses at you, wondering what your deal is.

Time to move on.

You stop at a public access point near the corner of a road.

The demands you send the ShinnCo emergency contact points are as follows:

One negotiator familiar with your case, with authority to bargain. The cart, fully functional, in the usual space. And you'll confirm the cart from a distance, making sure it isn't a fake.

Two hours. They couldn't get an identical fake, with heat generating machinery of the same signature inside in that time.

Or else?

Or else you have time enough to go hunting before the countdown hits the last second.

You'll need a hatchet, for starters.

• • • •

It's a metaphorical high noon. They're not going to back off, and neither are you. The first sign of weakness is death. You're locked in, no turning back.

They set a nice trap. The gyro stand is up, and what looks to be a middle-aged man stands there. He isn't putting much into the façade, half-heartedly telling interested passersby that he's out of flatbread.

You spot the three snipers on balconies above.

Two men in doors nearby, lounging.

Four pedestrians.

One by one would take far too long, so you steal a bubble cab.

Even the new gyro guy doesn't spot you until you swerve the stolen machine off the road and slam into the cart. Flour, flatbread, meat, and sauces explode into the air. They drip off the door as you swing it up and open, using it for cover as you knock the stunned man out with a flick of your wrist, and pull him into the car.

The shots start. Silent insect-like buzzes and then explosions of concrete. The glass windows of the cab explode, the seats kick up leather and stuffing. In addition to the glass splinters buried in your face, the concrete shards ripping your overcoat apart, they hit you in the thigh, and then again in a foot.

Keep moving.

You grab the hatchet and smash the cart apart while keeping low, and pull out what you need. Your forearm gets

hit, bone splitting out of the skin and causing waves of pain and nausea until things inside your body decide the pain is getting in the way of your ability to function.

The cab can barely hold everything. Glass bites you in the ass as you sit down and barrel out of there.

Engine smoking, tires flopping, it lasts long enough to get you deep into an alley.

The gyro man is coughing blood and dying in the back thanks to a well-aimed shot to the stomach. What you really want to do is get to work on him, make him forget about *that* pain and worry about a whole new universe of hurt. Maybe it will help you forget about yours.

Instead you work on bandaging your own wounds with strips of fabric torn off the overcoat and watch him struggle to stay conscious.

His eyes dilate, mouth drops open.

“I know about your memories,” he croaks.

“You the negotiator?” You hadn’t expected them to actually put him next to the cart. He ignores that, moves on.

“You don’t have any. You never had any,” he says quickly. “You came to ShinnCo looking for ways to reverse the process. But you were state of the art. Recent government surplus, useless after the Pacification. If ShinnCo didn’t claim you, some other corporation would. So they screwed you over.”

“I can’t help you,” you say. Even if an ambulance got here in time he wouldn’t make it back.

The man closes his eyes and groans. The inside of the cab smells of shit from his ruptured stomach. His messy hands are both folded over, he's almost fetal.

"Fuck them," he rasps. "They told me this would be easy. That you wouldn't even get to cross the street."

"They fucked you. They fuck everyone."

You watch him.

"At least you're as fucked as me," he says, eyes still closed. It's almost a whisper now.

You don't bother to tell him the truth.

Another long moment passes.

"They have what you did know on a recording. You had something stored. They have that."

"And do you know what I was?" you ask.

He shakes his head.

Then shudders.

Passes out.

The actual dying will take a while more. You slowly shift, reach to his head, and snap his neck. After rummaging around you pull his wallet out. A picture of a redhead. Girlfriend? Must be, you think. No ring.

So what price are you willing to pay for your self?

Is it worth it?

••••

Time heals all wounds.

In your case, it takes about three weeks before you

recover fully.

Now you're standing in front of that same booth, same alien in the pink gas, holding out your ticket. You have gotten your photo ID and background check (faked). It warbles behind the security glass.

“Name?”

“Pepper.”

“Secondary name?”

You pause.

“Smith.”

“The size of your luggage is unusual,” it protests.

“It is necessary,” you insist. The remains of the important bits of the gyro stand. And some extra devices to shield it from any ShinnCo attempts to make it call home and make your life miserable.

It looks at you.

“Human.” The word is unstressed through the speaker. But you know the meaning behind it.

You stare the creature down and wait.

The go-around takes several minutes, but the creature finally tacks on a massive surcharge and lets you through.

Settling into the capsule's launch chair, the long lines of the launch tube visible through the tiny portholes ahead of you, you pull your new overcoat closely around you.

You wonder if Susan can find room for you on her mining ship.

It's a wild non-world out there. One where humans are

minorities, alien conglomerates ply the worlds and negotiate with primitives like your own people for their gas giants and extra unused planets. They trade them for space access, advanced technology. Beads and glass many suspect, but not to primitive planets like Earth.

This is your new environment.
ShinnCo you can leave behind.

• • • •

You reach your hand up and caress the data amulet hanging from your neck. It is the memory of a sandy beach, your back relaxed against a palm tree. The gentle swish of the wind through leaves and water breaking against rocks at the end of the bay soothes you. That's it. A single memory of a life you once wanted to remember back. ShinnCo put a lot of security around it. Your past is the past.

The chair wraps around your waist and comes down your shoulders. You are the person you make yourself to be.

Fifteen seconds.

You are the person you are now.

The whine of the accelerators reaches a crescendo.

You're not going to look into the past and what you were.

Three seconds.

It really isn't important.

Launch.



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The Zeppelin Conductors' Society Annual

Gentlemen's Ball

by Genevieve Valentine

So hook yourself up to an airship
Strap on your mask and your knife
For the wide open skies are a-calling
And oh, it's a glorious life!

—Conductors Recruitment Advertisement,
1890

The balloon of a Phoenix-class airship is better than any view from its cabin windows; half a mile of silk pulled taut across three hundred metal ribs and a hundred gleaming spines is a beautiful thing. If your mask filter is dirty you get lightheaded and your sight goes reddish, so it looks as though the balloon is falling in love with you.

When that happens, though, you tap someone to let them know and you go to the back-cabin Underneath and fix your mask, if you've any brains at all. If you're helium-drunk enough to see red, soon you'll be hallucinating and too weak to move, and even if they get you out before you die you'll still spend the rest of your life at a hospital with all the

regulars staring at you. That's no life for an airship man.

I remember back when the masks were metal and you'd freeze in the winter, end up with layers of skin that peeled off like wet socks when you went landside and took the mask off. The polymer rubbers are much cleverer.

I've been a conductor for ages; I was conducting on the Majesty in '78 when it was still the biggest ship in the sky—you laugh, but back then people would show up by the hundreds just to watch it fly out of dock. She only had four gills, but she could cut through the air better than a lot of the six-fins, the Laconia too.

They put the Majesty in a museum already, I heard.

Strange to be so old and not feel it. At least the helium keeps us young, for all it turns us spindly and cold. God, when we realized what was happening to us! But they had warned us, I suppose, and it's fathoms better now than it was. Back then the regulars called you a monster if they saw you on the street.

The coin's not bad, either, compared to factory work. They say it's terrible what you end up like, but if you work the air you get pulled like taffy, and if you work in the factory you go deaf as a post; it's always something.

I'm saving a bit for myself for when I'm finished with this life, enough for a little house in the Alps. I need some altitude if I'm going to be landlocked; the air's too heavy down here.

• • • •

The very first ships were no better than hot-air balloons, and the conductors kept a tiny cabin and had to string themselves outside on cables if something happened. I can't imagine it—useless.

I didn't join up until after they moved conductors inside—it showed they had a lick of sense to put conductors where they could get to things that went wrong, and I'm not fond of looking down from heights.

The engine-shop shifted to airships as soon as they caught on, and I made two thousand ribs before I ever set foot inside a balloon. It makes for a certain confidence going in, which carried me through, thank goodness—I had a hard time with it at first.

You have to be careful how deeply you breathe so the oxygen filter doesn't freeze up on you, and you have to make sure your air tube doesn't get tangled on your tether, or your tether in someone else's. You have to learn how to fling yourself along so that the tether ring slides with you along the spine, and how to hook your fingers quickly into the little holes in the ribs when you have to climb down. You have to learn to deal with the cold.

The sign language I picked up at once. We had that at the factory, too, signals for when we were too far apart or when it was too loud. I'm fond of it; you get used to talking through the masks, and they're all good men in the air, but sometimes it's nice just to keep the quiet.

Captain Carter was very kind those first few months; he

was the only Captain I've ever had who would make trips into the balloon from the Underneath just to see how we were getting along. Back then we were all in it together, all still learning how to handle these beautiful birds.

Captains now can hardly be bothered to leave their bridges, but not Carter. Carter knew how to tighten a bolt as fast as any airship man, and he'd float through and shake hands whenever we'd done something well. He had a way of speaking about the Majesty, like a poem sometimes—a clever man. I've tried to speak as he did, but there's not much use for language when we're just bottled up with one another. Once or twice I've seen something sharply, the way he might have seen it—just once or twice.

You won't see his like again. He was of the old kind; he understood what it meant to love the sky like I do.

“A patient in the profession of Zeppelin conducting has, after very few years of work, advanced Heliosis due to excessive and prolonged exposure to helium within the balloon of an airship. His limbs have grown in length and decreased in musculature, making it difficult for him to comfortably maneuver on the ground for long periods of time. Mild exercise, concurrent with the wearing of an oxygen mask to prevent hyperventilation, alleviates the symptoms in time but has no lasting effect without regular

application, which is difficult for conductors to maintain while employed in their vessels.

“Other side effects are phrenological. Skin tightens around the skull. Patient has noticeable growth in those parts of the head dedicated to Concentrativeness, Combativeness, Locality, and Constructiveness. The areas of Amativeness, Form, and Cautiousness are smaller than normal, though it is hard to say if these personality defects are the work of prolonged wearing of conductor’s masks or the temperament of the patient. I suspect that in this case time will have to reveal what is yet unknown.

“The Zeppelin is without doubt Man’s greatest invention, and the brave men who labor in its depths are indispensable, but it behooves us to remember the story of Icarus and Daedalus; he should proceed wisely, who would proceed well.”

—from Doctor Jonathan Grant’s address to the Health Council, April 1895

The Captains’ Union set up the first Society for us, in London, and a year later in Paris.

They weren’t much more comfortable than the hospital rooms where they used to keep us landside, for safety, but of course it was more dignified. Soon we managed to organize ourselves and put together the Zeppelin Conductors’ Society,

and we tithed our own wages for the dues to fix the buildings up a bit.

Now you can fly to any city with an airdock and know there's a place for you to sleep where no one will look at you sidelong. You can get a private room, even, with a bath in the middle big enough to hold you; it's horrid how long your limbs get when you're in helium nine days in ten, and there's not much dignity in trying to wash with your legs sticking two feet out of the bath.

And it's good sense to have a place you can go straight away; regulars don't like to see you wandering about, sometimes. Most times. I understand.

WHAT TO DO WHEN YOU SEE A CONDUCTOR

- 1. Do not panic; he is probably as wary of you as you are of him. He will pose no threat if not provoked.*
- 2. Do not stare; scrutiny is vulgar.*
- 3. Offer a small nod when you pass, as you would to another gentlemen; it pleases them.*
- 4. Avoid smaller streets between airship docks and the local Conductor's Society. The conductor is, in general, a docile*

creature, but one can never be sure what effects the helium has had on his temperament.

—Public Safety Poster, 1886

January 1, 1900

PARIS—Polaris was eclipsed last night: not by any cosmic rival, but by a man-made beauty. The Laconia, a Phoenix-class feat of British engineering that has become the envy of the world, never looked more beautiful than on its evening flight to Paris as we began a momentous New Year.

Captain Richard Marks, looking every inch the matinee hero, guided the ship safely through the night as the passengers within lit up the sky with conversation and music, accompanied by a champagne buffet. Miss Marie Dawlish, the English Lark, honored the company with a song which it is suspected struck the heart of a certain airship Captain who stepped away from the bridge in time for the performance. Though we at the Daily are not prognosticators, we believe that the coming year may be one of high romance for Captain Marks, who touched down back in London with a gentle landing, and no doubt a song in his heart.

The Societies have the Balls each year for New Year's, which is great fun. It's ripping good food, and sometimes someone comes in a full evening suit and we can all have a laugh at them; it's an expensive round of tailoring to wear just once a year. You know just by looking that they who dressed up had wanted to be Captains and fallen short. Poor boys. I wouldn't be a Captain for all the gold in Araby, though perhaps when you're young you don't realize how proud and empty the Captains end up.

You don't meet a lot of ladies in the air, of course, and it's what all the lads miss most. For the London Ball they always manage to find some with the money from the dues—sweet girls who don't mind a chat. They have to be all right with sitting and talking. The Annual Gentlemen's Ball isn't much of a dance. The new conductors, the ones who have only stretched the first few inches, try a dance or two early on to give the musicians something to do. The rest of us have given in to gravity when we're trapped on the ground. We catch up with old mates and wait for a chance to ask a girl upstairs, if we're brave enough.

Sometimes we even get conductors in from other places—Russia, sometimes, or once from China. God, that was a night! What strange ideas they have about navigation! But he was built like an airship man, and from the red skin round his eyes we could tell he'd paid his dues in the helium, so we

poured him some Scotch and made him welcome. If we aren't kind to each other, who will be kind to us?

The Most Elegant Airlines Choose ORION Brand Masks!

Your conductors deserve masks that are SAFE, COMFORTABLE, and STYLISH. Orion has patented its unique India-Rubber polymer that is both flexible and airtight, ensuring the safest and most comfortable fit for your conductors. The oculars are green-tinted for sharper vision at night, and larger in diameter than any other brand, so conductors see more than ever before. Best of all, our filter-tank has an oxygen absorption rate of nearly Ninety Percent - the best in the world!

Swiss-made, British-tested, CONDUCTOR-APPROVED.

Soar with confidence among the stars—aim always for ORION.

—Orion Airship Supply Catalog, 1893

We were airside the last night of 1899, the night of the

Gentlemen's Ball.

We had been through a bad wind that day, and all of us were spread out tightening rivets on the ribs, signaling quietly back and forth. I don't know what made Anderson agree to sign us on for the evening flight—he must have wanted the Ball as much as the rest of us—and I was in a bit of a sulk, feeling like Cinderella. It was a cold night, cold even in the balloon, and I was wishing for nothing but a long bath and a long sleep.

Then Captain Marks shoved the woman into the balloon.

She was wearing a worn-out orange dress, and a worn-out shawl that fell away from her at once, and even as the captain clipped her to the line she hung limp, worn-out all over. He'd been at her for a while.

I still don't know where he found her, what they did to her, what she thought in the first moments as they carried her towards the balloon.

“Got some leftovers for you,” the Captain shouted through his mask, “a little Gentlemen's Ball for you brave boys. Enjoy!”

Then he was gone, spinning the lock shut behind him, closing us in with her.

I could feel the others hooking onto a rib or a spine, pushing off, hurrying over. The men in the aft might not have even seen it happen. I never asked them. Didn't want to know.

I was closest to her, fifty feet, maybe. Through the mask I

could see the buttons missing on the front of her dress, the little cuts in her fisted hands.

She wore a mask, too. Her hair was tangled in it.

She was terrified—shaking so hard that I worried her mask would come loose—but she didn't scrabble at her belt: too clever for that, I suppose. I was worried for her—if you weren't used to the helium it was painful to breathe for very long, she needed to get back Underneath. God only knew how long that second-rate mask would hold.

Even as Anderson hooked onto a spine to get to her she was shoving off—not to the locked porthole (there was no hope for her there), but straight out to the ribs, clawing at the stiff silk of the balloon.

We all scrambled for her.

I don't know how she cut the silk—Bristol said it must have been a knife, but I can't imagine they would have let her keep one. I think she must have used the hook of her little earring, which is the worst of it, somehow.

The balloon shuddered as the first rush of helium was sucked into the sky outside; she clenched one fist around the raw edge of the silk as she unhooked herself from the tether. The air caught her, dragging at her feet, and she grasped for purchase against the fabric. She cried out, but the mask swallowed the noise.

I was the closest; I pushed off.

The other conductors were shouting for her not to be foolish; they shouted that it was a misunderstanding, that she

would be all right with us.

As I came closer I held out my hands to her so she could take hold, but she shrank back, kicking at me with one foot, the boot half-fastened.

My reflection was distorted in the round eyes of her mask—a spindly monster enveloping her in the half-dark, my endless arms struggling to pull her back in.

What else could she do?

She let go.

My sight lit up from the rush of oxygen, and in my view she was a flaming June in a bottle-green night, falling with her arms outstretched like a bird until she was too small to be seen, until every bright trace of her was gone.

For a moment no one moved, then the rails shuddered under us as the gills fanned out, and we slowed.

Anderson said, “We’re coming up on Paris.”

“Someone should tell them about the tear,” said Bristol.

“Patch it from here,” Anderson said. “We’ll wait until Vienna.”

In Vienna they assumed all conductors were lunatics, and they would ask no questions about a tear that only human hands could make.

I heard the first clangs of the anchor-hooks latching onto the outer hull of the Underneath before the church bells rang in the New Year. Beneath us, the passengers shouted “Hip, hip, hurrah! Hip, hip, hurrah!”

That was a sad year.

• • • •

Once I was land-bound in Dover. The Conductor's Society there is so small I don't think ten men could fit in it. It wasn't a bad city (I had no trouble with the regulars on my way from the dock), but it was so horribly hot and cramped that I went outside just to have enough room to stretch out my arms, even heavy as they were with the Earth pulling at them.

A Falcon-class passed overhead, and I looked up just as it crossed the harvest moon; for a moment the balloon was illuminated orange, and I could see the conductors skittering about inside of it like spiders or shadow puppets, like moths in a lamp.

I watched it until it had passed the moon and fallen dark again, the lamp extinguished.

It's a glorious life, they say.



Genevieve Valentine's first novel, *Mechanique: a Tale of the Circus Tresaulti*, is forthcoming from Prime Books in 2011. Her short fiction has appeared in, or is forthcoming from: *Running with the Pack*, *Federations*, *The Living Dead II*, *The Way of the Wizard*, *Clarkesworld*, *Strange Horizons*, *Escape Pod*, and more. In addition to writing fiction, she is a columnist for Tor.com and *Fantasy Magazine*.

“...for a single yesterday” by George R. R. Martin

Keith was our culture, what little we had left. He was our poet and our troubadour, and his voice and his guitar were our bridges to the past. He was a time-tripper too, but no one minded that much until Winters came along.

Keith was our memory. But he was also my friend.

He played for us every evening after supper. Just beyond sight of the common house, there was a small clearing and a rock he liked to sit on. He'd wander there at dusk, with his guitar, and sit down facing west. Always west; the cities had been east of us. Far east, true, but Keith didn't like to look that way. Neither did the rest of us, to tell the truth.

Not everybody came to the evening concerts, but there was always a good crowd, say three-fourths of the people in the commune. We'd gather around in a rough circle, sitting on the ground or lying in the grass by ones and twos. And Keith, our living hi-fi in denim and leather, would stroke his beard in vague amusement and begin to play.

He was good, too. Back in the old days, before the Blast, he'd been well on his way to making a name for himself. He'd come to the commune four years ago for a rest, to check up on old friends and get away from the musical rat race for a summer. But he'd figured on returning.

Then came the Blast. And Keith had stayed. There was

nothing left to go back to. His cities were graveyards full of dead and dying, their towers melted tombstones that glowed at night. And the rats—human and animal—were everywhere else.

In Keith, those cities still lived. His songs were all of the old days, bittersweet things full of lost dreams and loneliness. And he sang them with love and longing. Keith would play requests, but mostly he stuck to his kind of music. A lot of folk, a lot of folk-rock, and a few straight rock things and show tunes. Lightfoot and Kristofferson and Woody Guthrie were particular favorites. And once in a while he'd play his own compositions, written in the days before the Blast. But not often.

Two songs, though, he played every night. He always started with “They Call the Wind Maria” and ended with “Me and Bobby McGee.” A few of us got tired of the ritual, but no one ever objected. Keith seemed to think the songs fit us, somehow, and nobody wanted to argue with him.

Until Winters came along, that is. Which was in a late-fall evening in the fourth year after the Blast.

His first name was Robert, but no one ever used it, although the rest of us were all on a first name basis. He'd introduced himself as Lieutenant Robert Winters the evening he arrived, driving up in a jeep with two other men. But his Army didn't exist anymore, and he was looking for refuge and help.

That first meeting was tense. I remember feeling very

scared when I heard the jeep coming, and wiping my palms on my jeans as I waited. We'd had visitors before. None of them very nice.

I waited for them alone. I was as much a leader as we had in those days. And that wasn't much. We voted on everything important, and nobody gave orders. So I wasn't really a boss, but I was a greeting committee. The rest scattered, which was good sense. Our last visitors had gone in big for slugging people and raping the girls. They'd worn black-and-gold uniforms and called themselves the Sons of the Blast. A fancy name for a rat pack. We called them SOB's too, but for other reasons.

Winters was different, though. His uniform was the good ol' U.S. of A. Which didn't prove a thing, since some Army detachments are as bad as the rat packs. It was our own friendly Army that went through the area in the first year after the Blast, scorching the towns and killing everyone they could lay their hands on.

I don't think Winters was part of that, although I never had the courage to flat-out ask him. He was too decent. He was big and blond and straight, and about the same age as the rest of us. And his two "men" were scared kids, younger than most of us in the commune. They'd been through a lot, and they wanted to join us. Winters kept saying that he wanted to help us rebuild.

We voted them in, of course. We haven't turned anyone away yet, except for a few rats. In the first year, we even took

in a half-dozen citymen and nursed them while they died of radiation burns.

Winters changed us, though, in ways we never anticipated. Maybe for the better. Who knows? He brought books and supplies. And guns, too, and two men who knew how to use them. A lot of the guys on the commune had come there to get away from guns and uniforms, in the days before the Blast. So Pete and Crazy Harry took over the hunting, and defended us against the rats that drifted by from time to time. They became our police force and our army.

And Winters became our leader.

I'm still not sure how that happened. But it did. He started out making suggestions, moved on to leading discussions, and wound up giving orders. Nobody objected much. We'd been drifting ever since the Blast, and Winters gave us a direction. He had big ideas, too. When I was spokesman, all I worried about was getting us through until tomorrow. But Winters wanted to rebuild. He wanted to build a generator, and hunt for more survivors, and gather them together into a sort of village. Planning was his bag. He had big dreams for the day after tomorrow, and his hope was catching.

I shouldn't give the wrong impression, though. He wasn't any sort of a tin tyrant. He led us, yeah, but he was one of us, too. He was a little different from us, but not *that* different, and he became a friend in time. And he did his part to fit in. He even let his hair get long and grew a beard.

Only Keith never liked him much.

Winters didn't come out to concert rock until he'd been with us over a week. And when he did come, he stood outside the circle at first, his hands shoved into his pockets. The rest of us were lying around as usual, some singing, some just listening. It was a bit chilly that night, and we had a small fire going.

Winters stood in the shadows for about three songs. Then, during a pause, he walked closer to the fire. "Do you take requests?" he asked, smiling uncertainly.

I didn't know Winters very well back then. But I knew Keith. And I tensed a little as I waited for his answer.

But he just strummed the guitar idly and stared at Winters' uniform and his short hair. "That depends," he said at last. "I'm not going to play 'Ballad of the Green Berets,' if that's what you want."

An unreadable expression flickered over Winters' face. "I've killed people, yes," he said. "But that doesn't mean I'm proud of it. I wasn't going to ask for that."

Keith considered that, and looked down at his guitar. Then, seemingly satisfied, he nodded and raised his head and smiled. "Okay," he said. "What do you want to hear?"

"You know 'Leavin' on a Jet Plane'?" Winters asked.

The smile grew. "Yeah. John Denver. I'll play it for you. Sad song, though. There aren't any jet planes anymore, Lieutenant. Know that? 's true. You should stop and think why."

He smiled again, and began to play. Keith always had the last word when he wanted it. Nobody could argue with his guitar.

• • • •

A little over a mile from the common house, beyond the fields to the west, a little creek ran through the hills and the trees. It was usually dry in the summer and the fall, but it was still a nice spot. Dark and quiet at night, away from the noise and the people. When the weather was right, Keith would drag his sleeping bag out there and bunk down under a tree. Alone.

That's also where he did his timetripping.

I found him there that night, after the singing was over and everyone else had gone to bed. He was leaning against his favorite tree, swatting mosquitoes and studying the creekbed.

I sat down next to him. "Hi, Gary," he said, without looking at me.

"Bad times, Keith?" I asked.

"Bad times, Gary," he said, staring at the ground and idly twirling a fallen leaf. I watched his face. His mouth was taut and expressionless, his eyes hooded.

I'd known Keith for a long time. I knew enough not to say anything. I just sat next to him in silence, making myself comfortable in a pile of fresh-fallen leaves. And after a while he began to talk, as he always did.

"There ought to be water," he said suddenly, nodding at

the creek. “When I was a kid, I lived by a river. Right across the street. Oh, it was a dirty little river in a dirty little town, and the water was as polluted as all hell. But it was still water. Sometimes, at night, I’d go over to the park across the street, and sit on a bench, and watch it. For hours, sometimes. My mother used to get mad at me.”

He laughed softly. “It was pretty, you know. Even the oil slicks were pretty. And it helped me think. I miss that, you know. The water. I always think better when I’m watching water. Strange, right?”

“Not so strange,” I said.

He still hadn’t looked at me. He was still staring at the dry creek, where only darkness flowed now. And his hands were tearing the leaf into pieces. Slow and methodical, they were.

“Gone now,” he said after a silence. “The place was too close to New York. The water probably glows now, if there is any water. Prettier than ever, but I can’t go back. So much is like that. Every time I remember something, I have to remember that it’s gone now. And I can’t go back, ever. To anything. Except...except with that...” He nodded toward the ground between us. Then he finished with the leaf, and started another.

I reached down by his leg. The cigar box was where I expected it. I held it in both hands, and flipped the lid with my thumbs. Inside, there was the needle, and maybe a dozen small bags of powder. The powder looked white in the

starlight. But seen by day, it was pale, sparkling blue.

I looked at it and sighed. “Not much left,” I said.

Keith nodded, never looking. “I’ll be out in a month, I figure.” His voice sounded very tired. “Then I’ll just have my songs, and my memories.”

“That’s all you’ve got now,” I said. I closed the box with a snap and handed it to him. “Chronine isn’t a time machine, Keith. Just a hallucinogen that happens to work on memory.”

He laughed. “They used to debate that, way back when. The experts all said chronine was a memory drug. But they never *took* chronine. Neither have you, Gary. But I know. I’ve timetrippled. It’s not memory. It’s more. You go back, Gary, you really do. You live it again, whatever it was. You can’t change anything, but you know it’s real, all the same.”

He threw away what was left of his leaf, and gathered his knees together with his arms. Then he put his head atop them and looked at me. “You ought to timetrip someday, Gary. You really ought to. Get the dosage right, and you can pick your yesterday. It’s not a bad deal at all.”

I shook my head. “If I wanted to timetrip, would you let me?”

“No,” he said, smiling but not moving his head. “I found the chronine. It’s mine. And there’s too little left to share. Sorry, Gary. Nothing personal, though. You know how it is.”

“Yeah,” I said. “I know how it is. I didn’t want it anyway.”

“I knew that,” he said.

Ten minutes of thick silence. I broke it with a question. “Winters bother you?”

“Not really,” he said. “He seems okay. It was just the uniforms, Gary. If it wasn’t for those damn bastards in uniform and what they did, I *could* go back. To my river, and my singing.”

“And Sandi,” I said.

His mouth twisted into a reluctant smile. “And Sandi,” he admitted. “And I wouldn’t even need chronine to keep my dates.”

I didn’t know what to say to that. So I didn’t say anything. Finally, wearying, Keith slid forward a little, and lay back under the tree. It was a clear night. You could see the stars through the branches.

“Sometimes, out here at night, I forget,” he said softly, more to himself than to me. “The sky still looks the same as it did before the Blast. And the stars don’t know the difference. If I don’t look east, I can almost pretend it never happened.”

I shook my head. “Keith, that’s a game. It *did* happen. You can’t forget that. You know you can’t. And you can’t go back. You know that, too.”

“You don’t listen, do you, Gary? I *do* go back. I really do.”

“You go back to a dream world, Keith. And it’s dead, that world. You can’t keep it up. Sooner or later you’re going to have to start living in reality.”

Keith was still looking up at the sky, but he smiled gently

as I argued. “No, Gary. You don’t see. The past is as real as the present, you know. And when the present is bleak and empty, and the future more so, then the only sanity is living in the past.”

I started to say something, but he pretended not to hear. “Back in the city, when I was a kid, I never saw this many stars,” he said, his voice distant. “The first time I got into the country, I remember how shocked I was at all the extra stars they’d gone and stuck in my sky.” He laughed softly. “Know when that was? Six years ago, when I was just out of school. Also last night. Take your pick. Sandi was with me, both times.”

He fell silent. I watched him for a few moments, then stood up and brushed myself off. It was never any use. I couldn’t convince him. And the saddest part of it was, I couldn’t even convince myself. Maybe he was right. Maybe, for him, that was the answer.

“You ever been in the mountains?” he asked suddenly. He looked up at me quickly, but didn’t wait for an answer. “There was this night, Gary—in Pennsylvania, in the mountains. I had this old beat-up camper, and we were driving through, bumming it around the country.

“Then, all of a sudden, this fog hit us. Thick stuff, gray and rolling, all kind of mysterious and spooky. Sandi loved stuff like that, and I did too, kind of. But it was hell to drive through. So I pulled off the road, and we took out a couple of blankets and went off a few feet.

“It was still early, though. So we just lay on the blankets together, and held each other, and talked. About us, and my songs, and that great fog, and our trip, and her acting, and all sorts of things. We kept laughing and kissing, too, although I don’t remember what we said that was so funny. Finally, after an hour or so, we undressed each other and made love on the blankets, slow and easy, in the middle of that dumb fog.”

Keith propped himself up on an elbow and looked at me. His voice was bruised, lost, hurt, eager. And lonely. “She was beautiful, Gary. She really was. She never liked me to say that, though. I don’t think she believed it. She liked me to tell her she was pretty. But she was more than pretty. She *was* beautiful. All warm and soft and golden, with red-blond hair and these dumb eyes that were either green or gray, depending on her mood. That night they were gray, I think. To match the fog.” He smiled, and sank back, and looked up at the stars again.

“The funniest thing was the fog,” he said. Very slowly. “When we’d finished making love, and we lay back together, the fog was gone. And the stars were out, as bright as tonight. The stars came out for us. The silly goddamn voyeuristic stars came out to watch us make it. And I told her that, and we laughed, and I held her warm against me. And she went to sleep in my arms, while I lay there and looked at stars and tried to write a song for her.”

“Keith...” I started.

“Gary,” he said. “I’m going back there tonight. To the

fog and the stars and my Sandi.”

“Damn it, Keith,” I said. “Stop it. You’re getting yourself hooked.”

Keith sat up again and began unbuttoning his sleeve. “Did you ever think,” he said, “that maybe it’s not the drug that I’m addicted to?” And he smiled very broadly, like a cocky, eager kid.

Then he reached for his box, and his timetrip. “Leave me alone,” he said.

• • • •

That must have been a good trip. Keith was all smiles and affability the next day, and his glow infected the rest of us. The mood lasted all week. Work seemed to go faster and easier than usual, and the nightly song sessions were as boisterous as I can remember them. There was a lot of laughter, and maybe more honest hope than we’d had for quite a while.

I shouldn’t give Keith all the credit, though. Winters was already well into his suggestion-making period, and things were happening around the commune. To begin with, he and Pete were already hard at work building another house—a cabin off to the side of the common house. Pete had hooked up with one of the girls, and I guess he wanted a little more privacy. But Winters saw it as the first step toward the village he envisioned.

That wasn’t his only project, either. He had a whole

sheaf of maps in his jeep, and every night he'd drag someone off to the side and pore over them by candlelight, asking all sorts of questions. He wanted to know which areas we'd searched for survivors, and which towns might be worth looting for supplies, and where the rat packs liked to run, and that sort of thing. Why? Well, he had some "search expeditions" in mind, he said.

There was a handful of kids on the commune, and Winters thought we ought to organize a school for them, to replace the informal tutoring they'd been getting. Then he thought we ought to build a generator and get the electricity going again. Our medical resources were limited to a good supply of drugs and medicines; Winters thought that one of us should quit the fields permanently and train himself as a village doctor. Yeah, Winters had a lot of ideas, all right. And a good portion of 'em were pretty good, although it was clear that the details were going to require some working out.

Meanwhile, Winters had also become a regular at the evening singing. With Keith in a good mood, that didn't pose any real problems. In fact, it livened things up a little.

The second night that Winters came, Keith looked at him very pointedly and swung into "Vietnam Rag," with the rest of us joining in. Then he followed it up with "Universal Solider." In between lyrics, he kept flashing Winters this taunting grin.

Winters took it pretty well, however. He squirmed and looked uncomfortable at first, but finally entered into the spirit

of the thing and began to smile. Then, when Keith finished, he stood up. “If you’re so determined to cast me as the commune’s very own friendly reactionary, well I guess I’ll have to oblige,” he said. He reached out a hand. “Give me that guitar.”

Keith looked curious but willing. He obliged. Winters grabbed the instrument, strummed it a few times uncertainly, and launched into a robust version of “Okie from Muskogee.” He played like his fingers were made of stone, and sang worse. But that wasn’t the point.

Keith began laughing before Winters was three bars into the song. The rest of us followed suit. Winters, looking very grim and determined, plowed on through to the bitter end, even though he didn’t know all the words and had to fake it in spots. Then he did the Marine hymn for an encore, ignoring all the hissing and moaning.

When he was finished, Pete clapped loudly. Winters bowed, smiled, and handed the guitar back to Keith with an exaggerated flourish.

Keith, of course, was not one to be topped easily.

He nodded at Winters, took the guitar, and promptly did “Eve of Destruction.”

Winters retaliated with “Welfare Cadillac.” Or tried to. Turned out he knew hardly any of the words, so he finally gave that up and settled for “Anchors Aweigh.”

That sort of thing went on all night, as they jousting back and forth, and everybody else sat around laughing. Well,

actually we did more than laugh. Generally we had to help Winters with his songs, since he didn't really know any of them all the way through. Keith held his own without us, of course.

It was one of the more memorable sessions. The only thing it really had in common with Keith's usual concerts was that it began with "They Call the Wind Maria," and ended with "Me and Bobby McGee."

But the next day, Keith was more subdued. Still some kidding around between him and Winters, but mostly the singing slipped back into the older pattern. And the day after, the songs were nearly all Keith's kind of stuff, except for a few requests from Winters, which Keith did weakly and halfheartedly.

I doubt that Winters realized what was happening. But I did, and so did most of the others. We'd seen it before. Keith was getting down again. The afterglow from his latest timetrip was fading. He was getting lonely and hungry and restless. He was itching, yet again, for his Sandi.

Sometimes, when he got that way, you could almost see the hurt. And if you couldn't see it, you could hear it when he sang. Loud and throbbing in every note.

Winters heard it too. He'd have had to be deaf to miss it. Only I don't think he understood what he heard, and I know he didn't understand Keith. All he knew was the anguish he heard. And it troubled him.

So, being Winters, he decided to do something about it.

He came to Keith.

I was there at the time. It was midmorning, and Keith and I had come in from the field for a break. I was sitting on the well with a cup of water in my hand, and Keith was standing next to me talking. You could tell that he was getting ready to timetrip again, soon.

He was very down, very distant, and I was having trouble reaching him.

In the middle of all this, Winters comes striding up, smiling, in his Army jacket. His house was rising quickly, and he was cheerful about it, and he and Crazy Harry had already mapped out the first of their “search expeditions.”

“Hello, men,” he said when he joined us at the well. He reached for the water, and I passed my cup.

He took a deep drink and passed it back. Then he looked at Keith. “I enjoy your singing,” he said. “I think everybody else does, too. You’re very good, really.” He grinned. “Even if you are an anarchistic bastard.”

Keith nodded. “Yeah, thanks,” he said. He was in no mood for fooling around.

“One thing, though, has been bothering me,” Winters said. “I figured maybe I could discuss it with you, maybe make a few suggestions. Okay?”

Keith stroked his beard and paid a little more attention. “Okay. Shoot, Colonel.”

“It’s your songs. I’ve noticed that most of them are pretty...down, let’s say. Good songs, sure. But sort of

depressing, if you know what I mean. Especially in view of the Blast. You sing too much about the old days, and things we've lost. I don't think that's good for morale. We've got to stop dwelling so much on the past if we're ever going to rebuild."

Keith stared at him, and slumped against the well. "You gotta be kidding," he said.

"No," said Winters. "No, I mean it. A few cheerful songs would do a lot for us. Life can still be good and worthwhile if we work at it. You should tell us that in your music. Concentrate on the things we still have. We need hope and courage. Give them to us."

But Keith wasn't buying it. He stroked his beard, and smiled, and finally shook his head. "No, Lieutenant, no way. It doesn't work like that. I don't sing propaganda, even if it's well-meant. I sing what I feel."

His voice was baffled. "Cheerful songs, well...no. I can't. They don't work, not for me. I'd like to believe it, but I can't, you see. And I can't make other people believe if I don't. Life is pretty empty around here, the way I see it. And not too likely to improve. And...well, as long as I see it that way, I've got to sing it that way. You see?"

Winters frowned. "Things aren't *that* hopeless," he said. "And even if they were, we can't admit it, or we're finished."

Keith looked at Winters, at me, then down into the well. He shook his head again, and straightened. "No," he said simply, gently, sadly. And he left us at the well to stalk silently

in the fields.

Winters watched him go, then turned to me. I offered him more water, but he shook his head. “What do you think, Gary?” he said. “Did I have a point? Or did I?”

I considered the question, and the asker. Winters sounded very troubled and very sincere. And the blond stubble on his chin made it clear that he was trying his best to fit in. I decided to trust him, a little.

“Yes,” I said. “I know what you were driving at. But it’s not that easy. Keith’s songs aren’t just songs. They mean things to him.”

I hesitated, then continued. “Look, the Blast was hell for everybody, I don’t have to tell you that. But most of us out here, we chose this kind of life, ‘cause we wanted to get away from the cities and what they stood for. We miss the old days, sure. We’ve lost people, and things we valued, and a lot that made life joyful. And we don’t much care for the constant struggle, or for having to live in fear of the rat packs. Still, a lot of what we valued is right here on the commune, and it hasn’t changed that much. We’ve got the land, and the trees, and each other. And freedom of a sort. No pollution, no competition, no hatred. We like to remember the old days, and the *good* things in the cities—that’s why we Like Keith’s singing—but now has its satisfactions too.

“Only, Keith is different. He didn’t choose this way, he was only visiting. His dreams were all tied up with the cities, with poetry and music and people and noise. And he’s lost his

world; everything he did and wanted to do is gone. And...and well, there was this girl. Sandra, but he called her Sandi. She and Keith lived together for two years, traveled together, did everything together. They only split for a summer, so she could go back to college. Then they were going to join up again. You understand?"

Winters understood. "And then the Blast?"

"And then the Blast. Keith was here, in the middle of nowhere. Sandi was in New York City. So he lost her, too. I think sometimes that if Sandi had been with him, he'd have gotten over the rest. She was the most important part of the world he lost, the world they shared together. With her here, they could have shared a new world and found new beauties and new songs to sing. But she wasn't here, and..."

I shrugged.

"Yeah," said Winters solemnly. "But it's been four years, Gary. I lost a lot too, including my wife. But I got over it. Sooner or later, mourning has to stop."

"Yes," I said. "For you, and for me. I haven't lost that much, and you...you think that things will be good again. Keith doesn't. Maybe things were *too* good for him in the old days. Or maybe he's just too romantic for his own good. Or maybe he loved harder than we did. All I know is that *his* dream tomorrow is like his yesterday, and mine isn't. I've never found anything I could be that happy with. Keith did, or thinks he did. Same difference. He wants it back."

I drank some more water, and rose. "I've got to get back

to work,” I said quickly, before Winters could continue the conversation. But I was thoughtful as I walked back to the fields.

There was, of course, one thing I hadn't told Winters, one important thing. The timetripping. Maybe if Keith was forced to settle for the life he had, he'd come out of it. Like the rest of us had done.

But Keith had an option; Keith could go back. Keith still had his Sandi, so he didn't *have* to start over again.

That, I thought, explained a lot. Maybe I should have mentioned it to Winters. Maybe.

• • • •

Winters skipped the singing that night. He and Crazy Harry were set to leave the next morning, to go searching to the west. They were off somewhere stocking their jeep and making plans.

Keith didn't miss them any. He sat on his rock, warmed by a pile of burning autumn leaves, and out-sung the bitter wind that had started to blow. He played hard and loud, and sang sad. And after the fire went out, and the audience drifted off, he took his guitar and his cigar box and went off toward the creek.

I followed him. This time the night was black and cloudy, with the smell of rain in the air. And the wind was strong and cold. No, it didn't sound like people dying. But it moved through the trees and shook the branches and whipped

away the leaves. And it sounded...restless.

When I reached the creek, Keith was already rolling up his sleeve.

I stopped him before he took his needle out. "Hey, Keith," I said, laying a hand on his arm. "Easy. Talk first, okay?"

He looked at my hand and his needle, and returned a reluctant nod. "Okay, Gary," he said. "But short. I'm in a rush. I haven't seen Sandi for a week."

I let go his arm and sat down. "I know."

"I was trying to make it last, Gar. I only had a month's worth, but I figured I could make it last longer if I only timetrippd once a week." He smiled. "But that's hard."

"I know," I repeated. "But it would be easier if you didn't think about her so much."

He nodded, put down the box, and pulled his denim jacket a little tighter to shut out the wind. "I think too much," he agreed. Then, smiling, he added, "Such men are dangerous."

"Ummm, yeah. To themselves, mostly." I looked at him, cold and huddled in the darkness. "Keith, what will you do when you run out?"

"I wish I knew."

"I know," I said. "Then you'll forget. Your time machine will be broken, and you'll have to live today. Find somebody else and start again. Only it might be easier if you'd start now. Put away the chronine for a while. Fight it."

“Sing cheerful songs?” he asked sarcastically.

“Maybe not. I don’t ask you to wipe out the past, or pretend it didn’t happen. But try to find something in the present. You know it can’t be as empty as you pretend. Things aren’t black and white like that. Winters was part right, you know—there *are* still good things. You forget that.”

“Do I? What do I forget?”

I hesitated. He was making it hard for me. “Well...you still enjoy your singing. You know that. And there could be other things. You used to enjoy writing your own stuff. Why don’t you work on some new songs? You haven’t written anything to speak of since the Blast.”

Keith had picked up a handful of leaves and was offering them to the wind, one by one. “I’ve thought of that. You don’t know how much I’ve thought of that, Gary. And I’ve *tried*. But nothing comes.” His voice went soft right then. “In the old days, it was different. And you know why. Sandi would sit out in the audience every time I sang. And when I did something new, something of mine, I could see her brighten. If it was good, I’d know it, just from the way she smiled. She was proud of me, and my songs.”

He shook his head. “Doesn’t work now, Gary. I write a song now, and sing it, and...so what? Who cares? You? Yeah, maybe you and a few of the others come up after and say, ‘Hey, Keith, I liked that.’ But that’s not the same. My songs were *important* to Sandi, the same way her acting was important to me. And now my songs aren’t important to

anyone. I tell myself that shouldn't matter. I should get my own satisfaction from composing, even if no one else does. I tell myself that a lot. But saying it doesn't make it so."

Sometimes I think, right then, I should have told Keith that his songs were the most important thing in the world to me. But hell, they weren't. And Keith was a friend, and I couldn't feed him lies, even if he needed them.

Besides, he wouldn't have believed me. Keith had a way of recognizing truth.

Instead, I floundered. "Keith, you could find someone like that again, if you tried. There are girls in the commune, girls as good as Sandi, if you'd open yourself up to them. You could find someone else."

Keith gave me a calm stare, more chilling than the wind. "I don't need someone else, Gary," he said. He picked up the cigar box, opened it, and showed me the needle. "I've got Sandi."

• • • •

Twice more that week Keith timetripped. And both times he rushed off with a feverish urgency. Usually he'd wait an hour or so after the singing, and discreetly drift off to his creek. But now he brought the cigar box with him, and left even before the last notes of "Me and Bobby McGee" had faded from the air.

Nobody mentioned anything, of course. We all knew Keith was timetripping, and we all knew he was running out.

So we forgave him, and understood. Everybody understood, that is, except Pete, Winters' former corporal. He, like Winters and Crazy Harry, hadn't been filled in yet. But one evening at the singing, I noticed him looking curiously at the cigar box that lay by Keith's feet. He said something to Jan, the girl he'd been sleeping with. And she said something back. So I figured he'd been briefed.

I was too right.

Winters and Crazy Harry returned a week, to the day, after their departure. They were not alone. They brought three young teen-agers, a guy and two girls, whom they'd found down west, in company with a group of rats. "In company," is a euphemism, of course. The kids had been slaves. Winters and Crazy had freed them.

I didn't ask what had happened to the rats. I could guess.

There was a lot of excitement that night and the night after. The kids were a little frightened of us, and it took a lot of attention to convince them that things would be different here. Winters decided that they should have their own place, and he and Pete began planning a second new cabin. The first one was nearing its crude completion.

As it turned out, Winters and Pete were talking about more than a cabin. I should have realized that, since I caught Winters looking at Keith very curiously and thoughtfully on at least two occasions.

But I didn't realize it. Like everyone else, I was busy getting to know the newcomers and trying to make them feel

at ease. It wasn't simple, that.

So I didn't know what was going on until the fourth evening after Winters' return. I was outside, listening to Keith sing. He'd just barely finished "They Call the Wind Maria," and was about to swing into a second song, when a group of people suddenly walked into the circle. Winters led them, and Crazy Harry was just behind him with the three kids. And Pete was there, with his arm around Jan. Plus a few others who hadn't been at the concert when it started but had followed Winters from the common house.

Keith figured they wanted to listen, I guess. He began to play. But Winters stopped him.

"No, Keith," he said. "Not right now. We've got business to take care of now, while everybody's together. We're going to talk tonight."

Keith's fingers stopped, and the music faded. The only sounds were the wind and the crackle of the nearby burning leaves. Everyone was looking at Winters.

"I want to talk about timetripping," Winters said.

Keith put down his guitar and glanced at the cigar box at the base of concert rock. "Talk," he said.

Winters looked around the circle, studying the impassive faces, as if he was weighing them before speaking. I looked too.

"I've been told that the commune has a supply of chronine," Winters began. "And that you use it for timetripping. Is that true, Keith?"

Keith stroked his beard, as he did when he was nervous or thoughtful. “Yeah,” he said.

“And that’s the *only* use that’s ever been made of this chronine?” Winters said. His supporters had gathered behind him in what seemed like a phalanx.

I stood up. I didn’t feel comfortable arguing from the ground. “Keith was the first one to find the chronine,” I said. “We were going through the town hospital after the Army had gotten through with it. A few drugs were all that were left. Most of them are in the commune stores, in case we need them. But Keith wanted the chronine. So we gave it to him, all of us. Nobody else cared much.”

Winters nodded. “I understand that,” he said very reasonably. “I’m not criticizing that decision. Perhaps you didn’t realize, however, that there are other uses or chronine besides timetripping.”

He paused. “Listen, and try to judge me fairly, that’s all I ask,” he said, looking at each of us in turn. “Chronine is a powerful drug; it’s an important resource, and we need all our resources right now. And timetripping—anyone’s timetripping—is an *abuse* of the drug. Not what it was intended for.”

That was a mistake on Winters’ part. Lectures on drug abuse weren’t likely to go over big in the commune. I could feel the people around me getting uptight.

Rick, a tall, thin guy with a goatee who came to the concerts every night, took a poke at Winters from the ground. “Bullshit,” he said. “Chronine’s time travel, Colonel. Meant to

be used for tripping.”

“Right,” someone else said. “And we gave it to Keith. I don’t want to timetrip, but he does. So what’s wrong with it?”

Winters defused the hostility quickly. “Nothing,” he said. “*If* we had an unlimited supply of chronine. But we don’t. Do we, Keith?”

“No,” Keith said quietly. “Just a little left.”

The fire was reflected in Winters’ eyes when he looked at Keith. It made it difficult to read his expression. But his voice sounded heavy. “Keith, I know what those time trips mean to you. And I don’t want to hurt you, really I don’t. But we need that chronine, all of us.”

“How?” That was me. I wanted Keith to give up chronine, but I’d be damned before I’d let it be taken from him. “How do we *need* the chronine?”

“Chronine is not a time machine,” Winters said. “It is a memory drug. And there are things we *must* remember.” He glanced around the circle. “Is there anyone here who ever worked in a hospital? An orderly? A candy-striper? Never mind. There might be, in a group this size. And they’d have seen things. Somewhere in the back of their skulls they’d *know* things we need to know. I’ll bet some of you took shop in high school. I’ll bet you learned all sorts of useful things. But how much do you remember? With chronine, you could remember it all. We might have someone here who once learned to make arrows. We might have a tanner. We might have someone who knows how to build a generator. We might

have a *doctor!*”

Winters paused and let that sink in. Around the circle, people shifted uneasily and began to mutter.

Finally Winters continued. “If we found a library, we wouldn’t burn the books for heat, no matter how cold it got. But we’re doing the same thing when we let Keith timetrip. *We’re* a library—all of us here, we have books in our heads. And the only way to read those books is with chronine. We should use it to help us remember the things we must know. We should hoard it like a treasure, calculate every recall session carefully, and make sure—make *absolutely* sure—that we don’t waste a grain of it.”

Then he stopped. A long, long silence followed; for Keith, an endless one. Finally Rick spoke again. “I never thought of that,” he said reluctantly. “Maybe you have something. My father was a doctor, if that means anything.”

Then another voice, and another; then a chorus of people speaking at once, throwing up half-remembered experiences that might be valuable, might be useful. Winters had struck paydirt.

He wasn’t smiling, though. He was looking at me.

I wouldn’t meet his eyes. I couldn’t. He had a point—an awful, awful point. But I couldn’t admit that, I couldn’t look at him and nod my surrender. Keith was my friend, and I had to stand by him.

And of all of us in the circle, I was the only one standing. But I couldn’t think of anything to say.

Finally Winters' eyes moved. He looked at concert rock. Keith sat there, looking at the cigar box.

The hubbub went on for at least five minutes, but at last it died of its own weight. One by one the speakers glanced at Keith, and remembered, and dropped off into awkward silence. When the hush was complete, Keith rose and looked around, like a man coming out of a bad dream.

“No,” he said. His voice was hurt and disbelieving; his eyes moved from person to person. “You can’t. I don’t...don’t *waste* chronine. You know that, all of you. I visit Sandi, and that’s not wasting. I need Sandi, and she’s gone. I have to go back. It’s my only way, my time machine.” He shook his head.

My turn. “Yes,” I said, as forcefully as I could manage. “Keith’s right. Waste is a matter of definition. If you ask me, the biggest waste would be sending people back to sleep through college lectures a second time.”

Laughter. Then other voices backed me. “I’m with Gary,” somebody said. “Keith needs Sandi, and we need Keith. It’s simple. I say he keeps the chronine.”

“No way,” someone else objected. “I’m as compassionate as anyone, but *hell*—howmany of our people have died over the last few years ‘cause we’ve bungled it when they needed doctoring? You remember Doug, two years ago? You shouldn’t need chronine for that. A bad appendix, and he dies. We butchered him when we tried to cut it out. If there’s a chance to prevent that from happening again—even a long

shot—I say we gotta take it.”

“No guarantee it won’t happen anyway,” the earlier voice came back. “You have to hit the right memories to accomplish anything, and even *they* may not be as useful as you’d like.”

“Shit. We have to *try*....”

“I think we have an obligation to Keith....”

“I think Keith’s got an obligation to *us*....”

And suddenly everybody was arguing again, hassling back and forth, while Winters and Keith and I stood and listened. It went on and on, back and forth over the same points. Until Pete spoke.

He stepped around Winters, holding Jan. “I’ve heard enough of this,” he said. “I don’t even think we got no argument. Jan here is gonna have my kid, she tells me. Well, damnit, I’m not going to take any chances on her or the kid dying. If there’s a way we can learn something that’ll make it safer, we take it. Especially I’m not gonna take no chances for a goddamn weakling who can’t face up to life. Hell, Keithie here wasn’t the only one hurt, so how does *he* rate? I lost a chick in the Blast too, but I’m not begging for chronine to dream her up again. I got a new chick instead. And that’s what you better do, Keith.”

Keith stood very still, but his fists were balled at his sides. “There are differences, Pete,” he said slowly. “Big ones. My Sandi was no chick, for one thing. And I loved her, maybe more than you can ever understand. I know you don’t understand pain, Pete. You’ve hardened yourself to it, like a

lot of people, by pretending that it doesn't exist. So you convinced everybody you're a tough guy, a strong man, real independent. And you gave up some of your humanity, too." He smiled, very much in control of himself now, his voice sure and steady. "Well, I won't play that game. I'll cling to my humanity, and fight for it if I must. I loved once, really loved. And now I hurt. And I won't deny either of those things, or pretend that they mean any less to me than they do."

He looked to Winters. "Lieutenant, I want my Sandi, and I won't let you take her away from me. Let's have a vote."

Winters nodded.

It was close, very close. The margin was only three votes. Keith had a lot of friends.

But Winters won.

Keith took it calmly. He picked up the cigar box, walked over, and handed it to Winters. Pete was grinning happily, but Winters didn't even crack a smile.

"I'm sorry, Keith," he said.

"Yeah," said Keith. "So am I." There were tears on his face. Keith was never ashamed to cry.

There was no singing that night.

• • • •

Winters didn't timetrip. He sent men on "search expeditions" into the past, all very carefully planned for minimum risk and maximum reward.

We didn't get any doctor out of it. Rick made three trips

back without coming up with any useful memories. But one of the guys remembered some valuable stuff about medicinal herbs after a trip back to a bio lab, and another jaunt recalled some marginally good memories about electricity.

Winters was still optimistic, though. He'd turned to interviewing by then, to decide who should get to use the chronine next. He was very careful, very thorough, and he always asked the right questions. No one went back without his okay. Pending that approval, the chronine was stored in the new cabin, where Pete kept an eye on it.

And Keith? Keith sang. I was afraid, the night of the argument, that he might give up singing, but I was wrong. He couldn't give up song, any more than he could give up Sandi. He returned to concert rock the very next evening, and sang longer and harder than ever before. The night after that he was even better.

During the day, meanwhile, he went about his work with a strained cheerfulness. He smiled a lot, and talked a lot, but he never *said* anything much. And he never mentioned chronine, or timetripping, or the argument.

Or Sandi.

He still spent his nights out by the creek, though. The weather was getting progressively colder, but Keith didn't seem to mind. He just brought out a few blankets and his sleeping bag, and ignored the wind, and the chill, and the increasingly frequent rains.

I went out with him once or twice to sit and talk. Keith

was cordial enough. But he never brought up the subjects that really mattered, and I couldn't bring myself to force the conversations to places he obviously didn't want to do. We wound up discussing the weather and like subjects.

These days, instead of his cigar box, Keith brought his guitar out to the creek. He never played it when I was there, but I heard him once or twice from a distance, when I was halfway back to the common house after one of our fruitless talks. No singing, just music. Two songs, over and over again. You know which two.

And after a while, just one. "Me and Bobby McGee." Night after night, alone and obsessed, Keith played that song, sitting by a dry creek in a barren forest. I'd always liked the song, but now I began to fear it, and a shiver would go through me whenever I heard those notes on the frosty autumn wind.

Finally, one night, I spoke to him about it. It was a short conversation, but I think it was the only time, after the argument, that Keith and I ever really reached each other.

I'd come with him to the creek, and wrapped myself in a heavy woolen blanket to ward off the cold, wet drizzle that was dripping from the skies. Keith lay against his tree, half into his sleeping bag, with his guitar on his lap. He didn't even bother to shield it against the damp, which bothered me.

We talked about nothing, until at last I mentioned his lonely creek concerts. He smiled. "You know why I play that song," he said.

“Yeah,” I said. “But I wish you’d stop.”

He looked away. “I will. After tonight. But tonight I play it, Gary. Don’t argue, please. Just listen. The song is all I have left now, to help me think. And I’ve needed it, ‘cause I been thinking a lot.”

“I warned you about thinking,” I said jokingly.

But he didn’t laugh. “Yeah. You were right, too. Or I was, or Shakespeare...whoever you want to credit the warning to. Still, sometimes you can’t help thinking. It’s part of being human. Right?”

“I guess.”

“I know. So I think with my music. No water left to think by, and the stars are all covered. And Sandi’s gone. Really gone now. You know, Gary...if I kept on, day to day, and didn’t think so much, I might forget her. I might even forget what she looked like. Do you think Pete remembers his chick?”

“Yes,” I said. “And you’ll remember Sandi. I’m sure of that. But maybe not quite so much...and maybe that’s for the best. Sometimes it’s good to forget.”

Then he looked at me. Into my eyes. “But I don’t *want* to forget, Gary. And I won’t. I won’t.”

And then he began to play. The same song. Once. Twice. Three times. I tried to talk, but he wasn’t listening. His fingers moved on, fiercely, relentlessly. And the music and the wind washed away my words.

Finally I gave up and left. It was a long walk back to the

common house, and Keith's guitar stalked me through the drizzle.

• • • •

Winters woke me in the common house, shaking me from my bunk to face a grim, gray dawn. His face was even grayer. He said nothing; he didn't want to wake the others, I guess. He just beckoned me outside.

I yawned and stretched and followed him. Just outside the door, Winters bent and handed me a broken guitar.

I looked at it blankly, then up at him. My face must have asked the question.

"He used it on Pete's head," Winters said. "And took the chronine. I think Pete has a mild concussion, but he'll probably be all right. Lucky. He could be dead, real easy."

I held the guitar in my hands. It was shattered, the wood cracked and splintered, several strings snapped. It must have been a hell of a blow. I couldn't believe it. "No," I said. "Keith...no, he couldn't ..."

"It's his guitar," Winters pointed out. "And who else would take the chronine?" Then his face softened. "I'm sorry, Gary. I really am. I think I understand why he did it. Still, I want him. Any idea where he could be?"

I knew, of course. But I was scared. "What...what will you do?"

"No punishment," he said. "Don't worry. I just want the chronine back. We'll be more careful next time."

I nodded. “Okay,” I said. “But nothing happens to Keith. I’ll fight you if you go back on your word, and the others will too.”

He just looked at me, very sadly, like he was disappointed that I’d mistrust him. He didn’t say a thing. We walked the mile to the creek in silence, me still holding the guitar.

Keith was there, of course. Wrapped in his sleeping bag, the cigar box next to him. There were a few bags left. He’d used only one.

I bent to wake him. But when I touched him and rolled him over, two things hit me. He’d shaved off his beard. And he was very, very cold.

Then I noticed the empty bottle.

We’d found other drugs with the chronine, way back when. They weren’t even guarded. Keith had used sleeping pills.

I stood up, not saying a word. I didn’t need to explain. Winters had taken it all in very quickly. He studied the body and shook his head.

“I wonder why he shaved?” he said finally.

“I know,” I said. “He never wore a beard in the old days, when he was with Sandi.”

“Yes,” said Winters. “Well, it figures.”

“What?”

“The suicide. He always seemed unstable.”

“No, Lieutenant,” I said. “You’ve got it all wrong, Keith

didn't commit suicide."

Winters frowned. I smiled.

"Look," I said. "If you did it, it would be suicide. You think chronine is only a drug for dreaming. Bui Keith figured it for a time machine. He didn't kill himself. That wasn't his style. He just went back to his Sandi. And this time, he made sure he stayed there."

Winters looked back at the body. "Yes," he said. "Maybe so." He paused. "For his sake, I hope that he was right."

• • • •

The years since then have been good ones, I guess. Winters is a better leader than I was. The timetrips never turned up any knowledge worth a damn, but the search expeditions proved fruitful. There are more than two hundred people in town now, most of them people that Winters brought in.

It's a real town, too. We have electricity and a library, and plenty of food. And a doctor—a real doctor that Winters found a hundred miles from here. We got so prosperous that the Sons of the Blast heard about us and came back for a little fun. Winters had his militia beat them off and hunt down the ones who tried to escape.

Nobody but the old commune people remember Keith. But we still have singing and music. Winters found a kid named Ronnie on one of his trips, and Ronnie has a guitar of his own. He's not in Keith's league, of course, but he tries

hard, and everybody has fun. And he's taught some of the youngsters how to play.

Only thing is, Ronnie likes to write his own stuff, so we don't hear many of the old songs. Instead we get postwar music. The most popular tune, right now, is a long ballad about how our army wiped out the Sons of the Blast.

Winters says that's a healthy thing; he talks about new music for a new civilization. And maybe he has something. In time, I'm sure, there will be a new culture to replace the one that died. Ronnie, like Winters, is giving us tomorrow.

But there's a price.

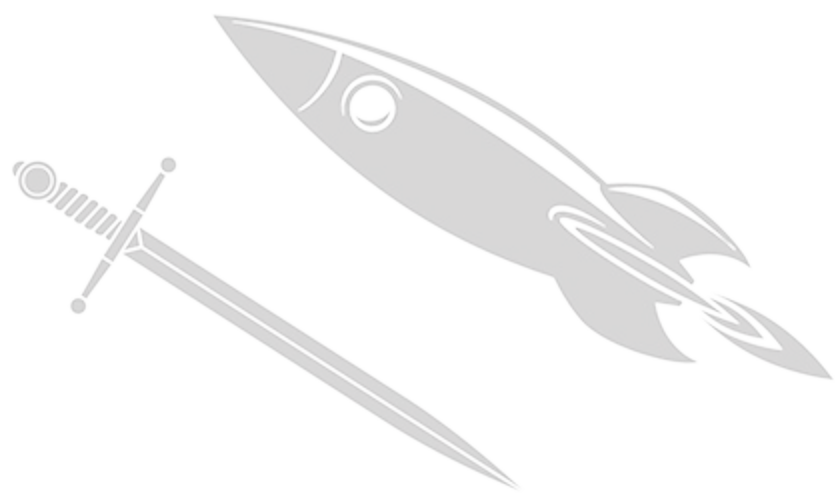
The other night, when Ronnie sang, I asked him to do "Me and Bobby McGee." But nobody knew the words.

—*Chicago, October 1972*



George R. R. Martin is the wildly popular author of the *A Song of Ice and Fire* epic fantasy series, and many other novels, such as *Dying of the Light* and *The Armageddon Rag*. His short fiction—which has appeared in numerous anthologies and in most if not all of the genre's major magazines—has garnered him four Hugos, two Nebulas, the Stoker, and the World Fantasy Award. Martin is also known for editing the *Wild Cards* series of shared world superhero anthologies, and for his work as a screenwriter on such television projects as the 1980s version of *The Twilight Zone* and *Beauty and the Beast*. A TV series based on *A Song of Ice and Fire* is set to debut on HBO in 2011.

NONFICTION



NONFICTION

Top Five Time Travel Nightmares by Carol Pinchefsky

Time travel is currently only a thought experiment, but if you have to dream, dream big. Who hasn't fantasized about going back in time to choose the winning lottery numbers, or to kill Hitler, or to say no to the prom date who drenched you in pig's blood?

There ought to be a guide for time travelers. But in the fine tradition of 1950s nuclear safety movies, why have a guide when you can learn by fear? So here's a look at what you can and should be afraid of in your time travels.

GETTING STUCK IN THE PAST/FUTURE

Because time travel is the stuff of science fiction and not fantasy, it likely requires some sensitive equipment to work. How sensitive? It needs to land you in both the right time and the right place (as well as the correct elevation, so that you won't end up cemented inside a mountain). But as any Windows user can tell you, technology sometimes fails spectacularly.

And that's the sort of thing that can leave you stranded where and when you least expect it.

If you're sent to the past and your equipment craps out, most likely you're absolutely and irrevocably stuck. After all, the raw ingredients that power your thingamawhatzit may not have been refined or even discovered yet. And your Uranium-235 might be able to let you witness the Crucifixion, but it's no better than pound cake if it's buried in a mountain along with your feet.

Now if your equipment fails in the *future*, you may actually have a shot at returning...if you can obtain the necessary requirements discreetly, of course. However, if the natives recognize you for what you are—a person born at the beginning of the computer age—be careful: you could be taken against your will and experimented on. After all, you still have the dregs of semi-unpolluted air in your lungs, and your brain can actually remember the feel of real sex. That makes you a valuable commodity.

Should you find yourself stuck in the past, it'd be a bummer knowing that Buffy the Vampire Slayer is forever out of reach. But let's face it, that's a million times better than life in the future—as a special exhibit in a zoo.

CHANGING THE UNIVERSE

Some time travel issues are more treacherous than others, and nothing is more fraught with peril than accidentally altering history. If you step off a predetermined path and crush a butterfly, time has a way of telling you that you should have joined PETA.

Think about it: every germy sneeze in the direction of a pregnant woman, every booze-fueled game of Russian Roulette with a stranger, you run the risk of altering the timeline. For every inconsequential moment, there's a chance of turning all the intellectuals you know into fans of *The Jersey Shore*.

If your time travel device adheres to the *Novikov Self-Consistency Principle* (you can't change history), then you're good to commit mass Lepidoptera-cide. But even if your device allows for the consequences of your actions, it's best to limit yourself to lurking in the shadows of historical events. If not, you could return to a world that seems eerily similar, yet for some strange reason your friends now call you Slappy.

CREATING PARALLEL UNIVERSES

One of time travel's unintended consequences is the risk of creating a parallel universe. But there could be an upside to this: in one world, you can settle down and start a family, and in the other, you can be free to pursue your work.

Think about it. In one universe, you get to live the mindless existence of a parent to a newborn and in the other the mindless existence of an entrepreneur endlessly seeking funding. In each of these realities, you'd wonder if the choices you made were correct ones, causing major self-confidence issues. So, unsure of yourself, you fracture the universe again, creating all new worlds where you aren't perpetually caught in traffic or where you always got the last

donut of the day.

Unfortunately, no matter how many parallel universes you create, the sad fact is you're still going wind up stuck on the 101, breathing in someone else's exhaust fumes.

ENFORCED CHASTITY

In order to avoid sleeping with your eventual grandmother, thus creating a nasty paradox, time travelers should adhere to a strict abstinence policy. But like most humans, you'll likely fall victim to those surging hormones known as the sex drive. 'Cuz really, if there's a choice between time travel versus sex with an attractive and willing partner, chemistry typically trumps physics.

But watch out. That busty barmaid or that handsome lad with a compound bow could be your great-grandparent. The cutie by the DNA-altering medispa? That's your great-grandchild. So buckle up your chastity belt, because if you hit that, your offspring will be born with twelve toes and a horrific sense of self-loathing.

We exaggerate. Cousins can safely interbreed. It's just icky.

CHANGING SOMEONE'S LIFE FOR THE WORSE

You may be restricted from changing the timeline in any way, but since you're devious, you can try to get someone to change it for you. Of course, that, too, would be a mistake.

Revealing information about the past or the future can cause unforeseen results in the person you reveal the information to. Ask a new friend to buy stock in IBM in the year 1930. There's no guarantee that he'll do what you say. But if he does, who's to stop him from taking the dividends for himself?

Think about it. Your actions can condemn your friend to getting rich and dying alone as he calls out in vain for the only things he's ever loved: his sled and his slave-powered munitions factory.

IN CONCLUSION

So before you push the button that sends you into a time not your own, don't. True, riches, glory, and revenge may beckon, but that there's fool's gold, son. The risks just may not be worth the reward.

Sure, you may be missing out on witnessing great events in history, but you can console yourself by knowing you're already traveling through time...at exactly one second per second into the future.



When she is not freelance writing, **Carol Pinchefskey** is the editor of the *Space Future Journal* (www.spacefuture.com), a website dedicated to space tourism, as well as the humor competition editor for *The Magazine of Fantasy & Science Fiction*. *To Serve Man* is her favorite cookbook.

NONFICTION

You Are the Person You Are Now by The Evil Monkey

Buddhist interpretations of personhood suggest that we have a misguided understanding of our own internal reality; we perceive ourselves as part of a continuous state of being, moving from day to day and year to year. You, my friend, are a constant. An individual. Self-awareness is self-evident, right?

That perception, however, may be wrong. Personalities can change as we walk through life. One day you're happy, the next, angry at losing your job. That anger can change you. Fear can change you, and some Buddhists would argue that you're really a new person from moment to moment, with memory providing only the illusion of continuity. Events can set us free, scar us temporarily or permanently. Memory is not just a personal narrative, it shapes who we are. We recall our memories and reflect upon them, and that mere act of reflection and evaluation can alter our choices and, thus, who we become.

So, in light of that, consider this man: Henry Gustav Molaison, for years known only as Patient HM. Back in the 50s, HM suffered from intractable seizures, painful episodes that made life unbearable, and it was concluded, after careful

evaluation, that surgery was his last, best option. So, on September 1st, 1953, Doctor William Scoville opened up HM's skull and cut out large swathes of his temporal cortex, his amygdala, his hippocampus—all brain areas that deal with types of memory.

His epilepsy was gone, sure. But with it, also, went a crucial part of his, or anyone's, personality: the ability to create and update the narrative of his life.

Anterograde Amnesia is the name of the condition.

Think *Memento*. HM could remember things almost up to the “event”—his surgery—but he was completely bereft of the ability to form any new memories afterwards. He was stuck, mentally, in a moment with no way of moving forward. He could remember what his wife looked like when they married but couldn't recognize her decades later. He was a stranger in the mirror. He could hold information in his short-term memory for a few moments, perhaps minutes if not distracted, but any longer and it would just evaporate. And if he met you, he couldn't recall it, not even if you re-introduce yourself to him ten seconds later. Or ten seconds after that. Or after that.

Declarative memories, or memories you can tell somebody about (e.g. episodic: “I was at the library.” Or semantic: “Delaware was the first state.”) were a problem as well, but previously learned motor skills like riding a bike were fine, clearly demonstrating there is no monolithic entity known as “memory” that is controlled by a single brain area,

or even a handful of them.

Back then it was thought that HM's deficit was due solely to hippocampal damage, but obviously we've learned that isn't the whole story. The hippocampus, a sea-horse shaped structure in the brain, is needed to form new memories and access some older memories, but many of those "long-term" memories are actually stored in numerous cortical areas as widely dispersed "neural nets." There isn't a specific physical location, *per se*, that corresponds to, say, remembering your first kiss. Stimulation of a specific brain region can trigger the memory, but likely because of activation of a distributed network of brain cells that all talk to each other.

As for destroying *past* memories, now that's a whole other story. Retrograde Amnesia, which makes the science fiction and noir genres so great, isn't too hard. So what if that rat has run the maze for months? Bam! Lesion—the rat has no clue how to find the cheese. We can cause some rough memory deficits similar to HM's in animals, too. We can even do it reversibly by temporarily cooling a brain region, or by using Lidocaine or other drugs that wear off instead of removing brain parts which, let's face it, can be a little messy.

For long-term memory suppression, there's the drug Propranolol, which is used to treat anxiety and Post Traumatic Stress Disorder and is sometimes called the "amnesia drug." That name obscures the truth a bit, though, since Propranolol doesn't actually make somebody forget fearful things, it

merely decouples emotions from events. You remember the trauma, just not the fear or anger that accompanied it.

Loss of one's past, that Retrograde Amnesia that ironically never gets old as a plot device no matter how many times it's used, is trickier, especially as we move towards targeted memory erasure. To be certain, people who experience traumatic events can have Retrograde Amnesia for big chunks of memories, but what if you just want to excise specific parts of your past? What if you want to pull an *Eternal Sunshine of the Spotless Mind* and get rid of memories of that ex-girlfriend who broke your heart, for example?

First, you need a way of mapping which brain areas are active and correspond to certain undesirable memories. Right now we can do that down to a couple cubic millimeters of tissue. But that's not enough. We would also need to map out activity of individual neurons, or, if possible, the activity of individual connections between neurons called synapses. But to give you an idea of how tremendously horrifying such an undertaking would be, there are between 10 and 100 billion neurons in the brain. Each neuron can make thousands of connections, and each connection can fire hundreds or even thousands of times a second. So...good luck with that.

Now, once this "simple" task of creating activity maps is done, we would then need a way to inhibit patterns of activity that correspond to undesirable memories. The problem here is that inhibiting those activity patterns with, pardon the pun,

surgical precision might be next to impossible, at least at the synaptic level. We would have better luck wiping out cells or groups of cells, and as they say in *Eternal Sunshine*, technically that procedure is brain damage.

However, that still doesn't lend itself to a spot-free mind. The more damage you do, the more your other memories will be affected. You didn't just have a girlfriend, you also had friends in common. You went to favorite restaurants. You hung out with each others' families for the holidays. Those memories won't be unaffected. You won't have a nice, clean ex-girlfriend shaped hole in each of those memories. You remove a painful memory, you leave the other memories around it all torn up and uncomfortable, because there's no context in which to find understanding. The ones that are left have gaps that don't make sense. So maybe those should be removed as well. Add, rinse, repeat.

And so now, here you are. You've got one memory left. It's peaceful, this one. You're a child, sitting on a beach, watching the sun go down. But this single, isolated memory, nice as it is, tells you nothing about who you are. The person you were is gone, lost at the end of a breadcrumb trail of burnt-away pasts. Good, bad, smart, dumb, all you've got now is your physical self and that sunset. Tabula rasa, baby.

And while, yes, the loss of all one's memories is a nightmarish scenario to contemplate, if, like the Buddhists say, you really are a new person from moment to moment, is it such a total tragedy? You still have the ability to create new

memories, right? Become a new you, write a new narrative? The action of life is forward moving. Dwelling in the past: that's for suckers. And in that truth, perhaps, is the essence of what makes us human. Kinda profound, huh?

Now consider, once again, Patient HM. His past memories remained largely intact, and in that way, at least, he remained himself. But what he did lose was the ability to evolve from that place. He simply no longer had the machinery to change, to become a new man. And no longer having that ability to learn, to grow, to create your own future? Well, that, too, is profound.

Profoundly disturbing.



The Evil Monkey has a Ph.D. in the neurosciences and used to study memory in primates for a living. He now resides in the Midwest and spends his professional time teaching at the local state university and community college. When not teaching, he is often engaged in an endless cycle of home repair or playing with his stepkids or writing his irreverent neuroscience blog *Neurotopia*.

NONFICTION

A Very Brief History of Airships by Gregory K. H. Bryant

From the Hindenburg to the Goodyear Blimp, airships have for centuries captured our collective imagination and, in recent years, given lift to the popularity of the steampunk genre. But how much do we know, really, about their history and evolution? How did steerable, lighter-than-air craft progress from some crackpot inventor's dream to the elegant, Victorian technology of literature?

Well, it certainly didn't happen overnight.

The "Golden Age" airships, in all their silvery, romantic glory, were, in fact, the culmination of nearly a hundred and fifty years of development in many disparate fields. That's a long history to sort through, so perhaps we should start with the precursor to the airship: the balloon.

As early as 1783, the Montgolfier brothers caused a huge sensation throughout the civilized world when, before a crowd including Louis XVI and Marie Antoinette, they heated the air inside an envelope of alum-varnished taffeta and launched a sheep, a duck and a rooster on an eight minute, two mile flight across the royal palace of Versailles, the first flight ever to carry a living creature. The Montgolfiers, subsequently, were rewarded for their efforts with elevation to

the nobility, and standard hot air balloons are to this day known as Montgolfiers.

Now, at the same time the brothers were busy flying farm animals across the French countryside, Jacques Charles and his buddies Les Frères Robert were in Paris doing nearly the same thing before a large, paying crowd that included then-American envoy to France, Benjamin Franklin. Instead of hot air, however, Charles was using hydrogen to obtain buoyancy. (And instead of the sheep, Charles himself and Nicolas-Louis Robert were the flight crew—a slightly more dignified pair of attendants.)

The flight of *la charliere* lasted a whopping two hours five minutes and featured such advanced controls as a hydrogen release valve and sand bag ballasts. Thereafter, the use of hydrogen as a lift element superseded hot air. (Helium, eventually, would come into play as the best alternative for lift, being both more buoyant than hot air and less volatile than hydrogen, but it was not produced in sufficient quantities for use with airships until after the First World War.)

Despite a great deal of creativity and novel invention, however, the real holy grail of LTA travel remained, for quite some time, completely out of reach: steerability.

In 1849, a newspaper editor rather shortsightedly wrote: “Now, a flying machine can never be steered. Yet...there will be dolts to believe in it, we suppose, to the end of time.” Probably a good thing no one mentioned space exploration to this guy.

He was, however, correct in one thing: there will be dolts to believe in it. And, in the great tradition of human endeavor, to try and achieve it.

A significant hurdle to making the balloons navigable was the spherical shape itself. With neither a fore nor aft end, the balloons were at the mercy of the breezes. Of course, that didn't stop various attempts to control the craft with flaps, wings, wheels and oars. But all those efforts merely spun the balloon helplessly around without providing the needed forward propulsion. A change in the shape of the craft was the order of the day, and that led to some, well...interesting configurations.

In 1852, Ernest Petin proposed a vessel of multiple balloons strung to a long, horizontal scaffolding. Solomon Andrews, in 1860, built his *Aereon* airship of three cylindrically shaped gas bags side by side. And in 1884, Alfred Boult planned to mount two balloons to a long, wooden cabin—one at either end—which was to be steered by oars protruding from the sides and pushed forward by a propeller at the aft.

But before all that nonsense, there was Jean Baptiste Meusnier. In 1784—right around the same time the Mongolfiers and Jacques Charles were floating around France—Meusnier was the first to propose the familiar long cigar shape still used today, and for this he is now known as the father of the modern dirigible.

Meusnier's plan was for a two hundred and sixty foot

long envelope with air cells—ballonets—to regulate lift. Forward motion would be provided by three airscrew propellers and steering by a rudder on the aft.

It was a good start, but, in the end, what airships really needed for true controllability was motorized propulsion.

Henri Giffard in 1852 built an airship powered by a three-horsepower steam engine. In 1872 German engineer Paul Haenlein flew a tethered dirigible with an internal combustion engine. But these engines, of course, were heavy. Any lift they achieved was marginal, so it isn't until 1884 that you get the first fully controlled free flight.

The ship was named *La France* and was constructed by Charles Renard and Arthur Krebs. Powered by electricity, the *La France* traveled almost five miles and made five full round trip flights to land back at its starting point. This demonstration of controllability was a huge achievement and silenced, once and for all, the naysayers.

Then, as the century turned, Ferdinand Adolf Heinrich Graf Von Zeppelin changed the game with the introduction of the *Luftschiff*.

Count Zeppelin was another one of those dolts who persisted in believing in the possibility of steerable flying machines. Born in Konstanz, Baden on July 8, 1838, he traveled to America and served as an observer with the Union cavalry during the Civil War, witnessing the use of balloons to observe and report on Confederate troop movements.

Returning to Europe, Zeppelin further observed the use

of balloons during the Siege of Paris, and, after seeing reports of the *La France*, he was convinced of the need for a German ship to counter the French.

So he petitioned the King of Württemberg for development support and worked fulltime with engineers to develop and refine his concept.

The result? *The Luftschiff Zeppelin 1*, or *LZ 1*, was launched before twelve thousand spectators on the banks of the Bodensee at 8 p.m. on the second of July, 1900. The Count himself was at the controls.

At four hundred and twenty feet in length, and thirty-eight feet in diameter, the *LZ 1* was then the largest thing ever built to fly and was the first of the rigid airships, dirigibles built with internal, aluminum skeletons that didn't depend on pressure to maintain their shape and so could be made larger, travel at greater speeds and withstand more inclement weather conditions.

Zeppelin and his men had the ship towed out of its hanger on the water by a steam launch while the locals looked on. The inaugural flight carried five people, reached an altitude of thirteen hundred feet and flew a distance of three and a half miles. But after eighteen minutes the craft was forced to return to the hanger due to engine trouble and a bent frame—not the flawless debut Zeppelin was hoping for.

Nevertheless, the maiden voyage of the *LZ 1* proved to be a ground-breaking event, leading, eventually, to the development of the most successful airship in the history of

LTA travel, the Zeppelin, and ushering in the glorious era of air transportation.

At last, the Golden Age of Airships had been born.



Gregory K. H. Bryant is a registrar with the National Air and Space Museum, where he has been on staff since 1978. His poetry, essays and short stories have appeared widely in the underground press, notably *Bouillabaisse*, *Wormfeast*, *Homemade Ice Cream Press*, *Musea*, and *Shockbox*, as well as *Gaslight Magazine* and *Black Lotus Magazine*.

NONFICTION

“Music Is Science Fiction”: An Interview With The Lisps by Desirina Boskovich

Brooklyn-based band **The Lisps** definitely bring a unique element to New York’s indie rock scene. Quirky performances and eclectic sounds, influenced by folk and bluegrass, lend playful charm to lyrics-driven songs that are cerebral and wistful by turns. Their first full-length album, *Country Doctor Museum*, was released in 2008, following a debut EP titled *The Vain, the Modest and the Dead*. And, as far as we know, they’re the first indie rock band to write and produce an original, steampunk musical fusing science fiction, experimental music, and the Civil War.

FUTURITY follows the wartime experience of aspiring science fiction writer and lowly Confederate soldier Julian Munro. While surrounded by destruction, Julian strikes up a correspondence with real-life metaphysician Ada Lovelace, history’s first female computer programmer. Together, the idealistic pair imagine a utopian future defined by an omnipotent machine that will end war once and for all.

<http://www.futuritythemusical.com/media.html>

Sammy Tunis and César Alvarez of The Lisps play the roles of Ada Lovelace and Julian Munro, backed by Lisps’

drummer Eric Farber. The play was written by Alvarez, and staged with the help of theatrical collaborators, as well as financial contributions from their fans, raised via Kickstarter.

Over the past two weeks, I've exchanged several e-mails with The Lisps. In the interview that follows, we touch on topics such as self-help songs, *The Difference Engine*, string theory, and, of course, The Singularity.

Broad question: what was the genesis for *FUTURITY*? What inspired your interest in Civil War history? Can you talk about the writing process for the musical?

César Alvarez: The idea for a concept album about a civil war soldier who was a science fiction writer literally just popped into my head while I was driving through Virginia in the fall of 2007. I held onto the idea for a while and then started working on it for my master's thesis performance at Bard the following spring. The idea quickly turned into a musical. ...[As] I started writing in this completely new form, I had no idea what I was doing. The early drafts of *FUTURITY* are bizarre lists and haiku-like texts. It has come a long way. The writing process has really been defined by the productions. If you count my thesis presentation at Bard, we've performed *FUTURITY* with four different casts in five different places. Each time we put the piece up the show is transformed, songs are added, characters developed, major plot points are changed, etc.

When you first began working on the project, did you conceive it as a “steampunk” piece, or is that a term that came along as the project evolved?

CA: Definitely not. It is an aesthetic that we’ve used to our advantage but we didn’t want to define ourselves that way because it seemed limiting. William Gibson and Bruce Sterling’s novel *The Difference Engine* is something I read during my research period which was hugely influential, and I’m pretty sure it was that book that introduced me to the historical figure of Ada Lovelace. Also, Julian’s world is very rustic and messy, not the brass-encrusted fantasy of steampunk. So in Julian’s fantasy world, we like that his machine is made from rusty and dilapidated parts because that’s what his experience is.

What were your aesthetic influences for the set design?

CA: The wonderful artist, and my soon-to-be wife, Emily Orling, did the set design. She is a visual artist and not a set designer and so she brought an atypical approach, I think. Her concept for the design was to use found and repurposed objects as the raw material for the world. So there was very little in the way of set pieces, and scenery. Everything was a real object folded into an imaginary context. A lot of the drum set/Steam Brain was built by Eric Farber, our drummer. Pretty much everything that he used as

percussion was something he found on E-Bay or in junk stores and then mounted to be part of his instrument. ... Part of what we were doing was to create a science-fictional work out of things that a civil war soldier might see around him... Ada's world was made from those kinds of materials, and even the natural landscape started to become mechanized and industrialized, but in an 1860's sort of way. We also relish some choice anachronisms, and in no aspect of *FUTURITY* are we overly pious about any time period or historical narrative.

One thing I loved about *FUTURITY* was the sensitive and sophisticated portrayal of Ada Lovelace, especially since the role of the female inventor is often overlooked in history and under-explored in science fiction. What inspired your interest in Lovelace, and how did you research her character?

CA: I first heard about Ada in *The Difference Engine*, and I was at the time really searching for how Sammy's character was going to fit into the piece. Since this was supposed to be a musical for our band I needed both Sammy and I to have pivotal characters. Ada became the perfect link into the history of computing and such a great mentor/idol/muse for Julian. Their worlds couldn't be more different and their relationship was so improbable that it was exciting territory. In earlier versions, Ada was imagined totally

by Julian, but we found that her role had much more power if we made her real and invested in Julian.

César, in a letter to your fans about *FUTURITY*, you wrote: “I like to think of music as a form of Utopianism. For me, Music is science fiction.” Could you expand upon that?

CA: I like to think about string theory, wherein the entirety of the universe is made up of infinitesimal vibrating strings. Music is the perfect metaphor for the way the universe is built. Musicians create physical organization through pure vibration. Music is also one of the earliest forms of organization. Someone banging a rock in rhythm is a very early form of civilization. Music is the “civilization” of air through the organizing properties of rhythm and harmonics. So I hold music to be one of the most important ways that humanity envisions alternative forms of organization, which, in essence, is also what science fiction does.

Regarding the themes of *FUTURITY*, you also wrote that “a feverish drive towards innovation is what keeps us alive and what can aid in our self-destruction.” Is this what fuels your interest in *The Singularity*?

CA: I’m so interested in technological singularity

because it seems very relevant. Future shock used to be something shared among generations. At this point, every few years you need to adjust your technological tools and mindset to understand what is happening around you. I think the discussion about tech singularity helps me understand what technology means in the context of society and it gives a frame of reference. I don't really subscribe to any Kurzweilian orthodoxy but I do think that the discussion is really fruitful.

You describe your band as “the public/performative version of all the relationships you’re struggling with.” Besides the angst and rewards of 21st-century relationships, what other themes do you explore in your songs?

Sammy Tunis: Lately the themes of our songs have touched less on personal relationships and more on science, space, time, The Singularity, and mathematics. The songs in the musical obviously follow somewhat of a narrative having to do with the relationship between scientific innovation and imagination, technological hubris and war, artificial intelligence, fantasy, etc, but there are also some pure love songs in there, too, and a lot of folk ballads. The songs on our forthcoming album really run the gamut as far as themes. ... There are a few songs I like to obnoxiously call Self-Help songs: “you should do this and that”, a song called “Try”

about trying new things, and a song called “Psychological Health.” Cesar’s about to get married, so a lot of the songs were written when he was falling in love with and living with his girlfriend and fall more in the domestic/love realm...

SF-themed music boasts a venerable tradition, from David Bowie and Sonic Youth to the Flaming Lips and Deltron 3030, etc, etc. What are your favorite “sci-fi songs,” other than your own, obviously?

My favorite sci-fi song is “Two-Slit Experiment” by Jess Segal. I was also hugely influenced by The Flaming Lips album *Yoshimi Battles the Pink Robots*, though you might not hear it in my music. I grew up almost exclusively listening to jazz and then came really late (in college) to most rock/pop music. I’ve probably read more sci-fi than listened to it.

Besides *The Difference Engine*, what science fiction books and stories have been influential for you? Or maybe just fun to read?

Mary Shelley’s *Frankenstein* was really important for *FUTURITY*, because it dealt with so many of the same issues and was in a pre-computer time frame. Other books I love: *Neuromancer*, *Parable of the Talents*, *The Forever War*, *Accelerando*, *2001*, *The Final Question*. Also, I have to give

credit to Betty A. Toole, who was the first to transcribe Ada's correspondence in her book *The Enchantress of Numbers*. Though that is all science fact, we relied heavily on her research for *FUTURITY*.

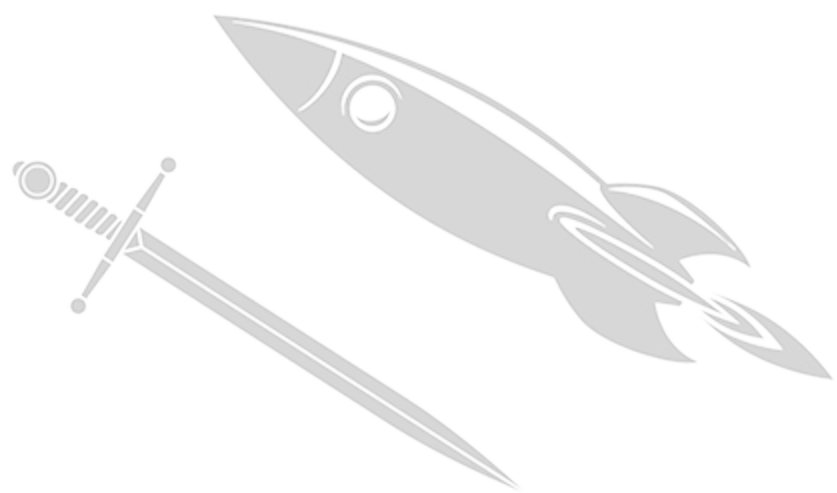
The Lisps are currently working on the next incarnation of *FUTURITY*, along with a *FUTURITY* concept album for full production in 2011, and their third album, tentatively titled "Are We at the Movies?" is slated for release this fall. Meanwhile, Alvarez is working on his next musical: *M-Brane: A Splendid Dimension*, a story about string theory and two untrained astronauts on a four-year space journey.

To learn more about The Lisps, hear their music, and find out where and when they're performing, visit them on Facebook and Myspace.



Desirina Boskovich is a freelance writer, specializing in weird, fantastic and unlikely things, both true and imaginary. She's also obsessed with avocados, llamas, perfume and keys. Her work is forthcoming in *Fantasy Magazine* and *The Way of the Wizard*, and has previously appeared in *Clarkesworld Magazine*, *Realms of Fantasy* and *Last Drink Bird Head*. She lives in Brooklyn, where she pets cats, drinks coffee, and enjoys other stereotypical things.

AUTHOR SPOTLIGHTS



Author Spotlight: Tobias S. Buckell

The character of Pepper appears in your novels and other short stories. Where in the “Pepper timeline” does this story fall?

This story comes sometime after “The Fish Merchant,” and before the story “Resistance.” And of course, well before the novels I’ve written.

What influenced your decision to tell this story in second person?

Originally this story was written in third person past, the usual choice for stories. There was a great deal of sparkle just not appearing, and I was looking for a way to get the story to pop for me as an author as I kept redrafting it. Often, when I’m having trouble with the sentence level work, I’ll change the tense or point of view in order to shake my habits up, and then turn the story back into the normal third person point of view and past tense in order to get it back to the standard. In this case, I liked the effect so much I decided to keep it. It really gave the story more impact, and it let me play with the narrative voice in ways I couldn’t. Since Pepper had his memory stolen from him, it also lent itself, I thought, to being a story the reader could slip into as a blank slate. So the more

I thought about it, the more I liked the idea.

Why do you think memory loss is such a terrifying and sad idea? How do you approach writing a character that knows little to nothing about their past?

I think authors turn to it a lot because often we don't know much about the character when we start writing a story. It is convenient. Sometimes lazy. But I love amnesiac characters, slowly discovering their past. It's one of my favorite tropes, and I have a collection of books and movies featuring it, because it always works for me.

Mostly I became interested in it when I started reading about the fact that people are starting to figure out how to erase, block, and alter memories in labs. And I began thinking, since corporations are always viewing everything as a potential acquirable resource, why wouldn't they own someone else's memories? As a down payment on services? You can walk away from a house that's been pledged as collateral, or savings. But your identity? They'd really own you.

ShinnCo *owns* Pepper by telling him that he can work his way back to his memories. What inspired you to feature such a manipulative company? What do they have to gain?

The more I read about modern corporations the more radically cynical about them I'm becoming. The idea that they'd use your memories against you, own them and in the process you, didn't seem like that much of a leap. Everything discoverable is monetizable. They tried to copyright DNA strands. Why not take your memories and use them to keep you on a leash?

For those who might be new to your work, can you talk a bit about your background and using the Caribbean as a backdrop for much of your work?

I was born in Grenada, in the Caribbean, and spent time in the British and US Virgin Islands. So when I grew up, I didn't see much in the way of the islands or people from other non-Western worlds in the science fiction I was reading. As a result, a large amount of my fiction features call outs to the Caribbean, Caribbean characters, and focuses a bit on ideas that come out of that area of the world.

What new projects do you have coming out that you'd like to tell our readers about?

My short story collection *Tides from The New Worlds* is floating around out there in eBook stores, as well as in a beautiful limited edition hardcover from Wyrms Publishing.

Other projects are hopefully coming down the pipeline soon!



Author Spotlight: Genevieve Valentine

Zeppelins are often associated with the Steampunk genre, and your story certainly has a Steampunk feel to it. What do you think Steampunk’s relationship is to science fiction? Is it a subgenre, or a close cousin? Do you think science fiction in general—both the canon and the community—is inclusive of things like Steampunk, or does it need to broaden further?

I think steampunk tends to live in the space between science fiction and fantasy, depending on how it’s utilized in each particular piece. I think that both the science fiction canon and the science fiction community have accepted steampunk elements for a long time; I think that as steampunk earns its permanent place in the canon, it will do so via the examination of some of the tropes on which previous steampunk has been built, which will both broaden and strengthen the collective canon.

In “Zeppelin Conductors’ Society” you structure your story and even tell parts of it through the use of ephemera—advertisements, promotional posters, and news clippings. Do you have a fascination with ephemera in general? What went into your decision to use that

technique to tell this story?

I love ephemera, and always have; I think that introducing outside artifacts, from ads to half-finished letters to propaganda radio ads, is a fantastic way to enhance a traditional narrative and introduce the reader to a wider world, allowing them to reframe the narrative in a different context.

“Zeppelin Conductor’s Society” is a story about how societal structures and technological demands can trap the individual (often with the individual’s consent). The ephemera help to present a society to the reader that the narrator is unable to present himself, because for a large portion of the story he is unaware of the forces marshaled against him, and even after he is made aware, he can’t quite face what he now knows he’s up against.

What can you tell us about the science in your story? Did you do much research? Is Heliosis strictly the product of your imagination, or is there science behind it?

Heliosis is largely a metaphor for any other ailment that would have plagued a laborer struggling to produce a small element of the aristocratic lifestyle the Victorian rich enjoyed. Working in cotton mills you caught byssinosis, steel mills deafened you, coal mining gave you black lung; it stands to reason that, had zeppelins been available to the Victorians, they wouldn’t have hesitated to put working-class men into

the dangerous positions, and then start a class-stratification propaganda campaign when things went sideways on them.

That said, I did do some research into the general effects of exposure to helium gas, which has several of the psycholigcal effects mentioned in the story, and contributes in a general way to the sort of physical ailments that would come of exerting oneself in a low-oxygen environment with less-than-perfect filtration.

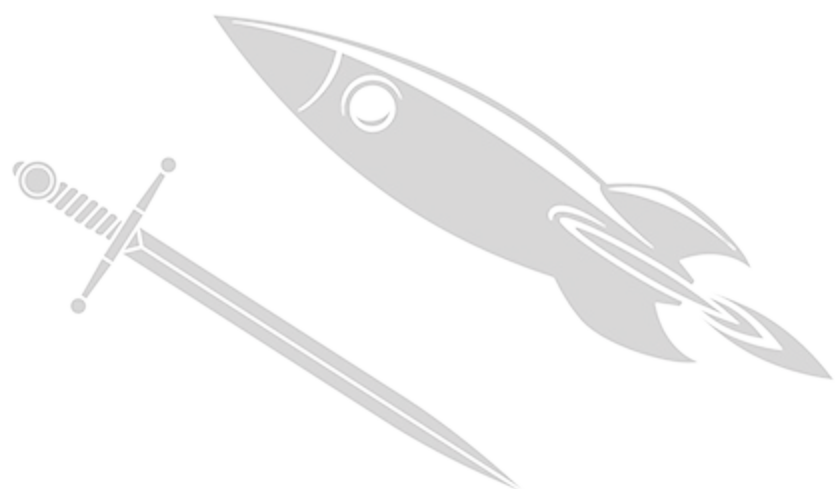
Do you find yourself revisiting certain themes in your work? What other works—of your own or others—would you recommend to readers who enjoyed this story?

I'm not sure this is a question the author can ever objectively answer (unless it's something really handy like, "Cake has appeared in all my works"), but I would say that the struggle of the individual against an immovable and intangible force of some kind or another is a theme to which I return.

This story is also one of the stories in which I try to examine a base trope that's often applied without examination. In this case, every time a heroic steampunk-airship captain takes to the skies, there is a culture of invisible workers and a particular celebrity culture that are working in his favor, but neither one is designed to turn him into a particularly nice guy; and, as often happens, others will suffer from it far more than he ever will.



MISCELLANY



About the Editor

John Joseph Adams, in addition to serving as publisher and editor-in-chief of *Lightspeed*, is the series editor of *Best American Science Fiction & Fantasy*, published by Houghton Mifflin Harcourt. He is also the bestselling editor of many other anthologies, such as *The Mad Scientist's Guide to World Domination*, *Armored*, *Brave New Worlds*, *Wastelands*, and *The Living Dead*. Recent and forthcoming projects include: *Help Fund My Robot Army!!! & Other Improbable Crowdfunding Projects*, *Robot Uprisings*, *Dead Man's Hand*, *Operation Arcana*, *Wastelands 2*, *Press Start to Play*, and *The Apocalypse Triptych: The End is Nigh*, *The End is Now*, and *The End Has Come*. Called “the reigning king of the anthology world” by Barnes & Noble, John is a winner of the Hugo Award (for which he has been nominated eight times) and is a six-time World Fantasy Award finalist. John is also the editor and publisher of *Nightmare Magazine* and is a producer for Wired.com's *The Geek's Guide to the Galaxy* podcast. Find him on Twitter @johnjosephadams.

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The Geek's Guide to the Galaxy is an interview/talk show hosted by author David Barr Kirtley (*New Voices in Science Fiction, Fantasy: The Best of the Year*) and produced by editor/anthologist John Joseph Adams (*Lightspeed Magazine, The Living Dead*).

The show covers fantasy and science fiction in literature, film, graphic novels, and video games, as well as related topics such as science, technology, and critical thinking. Each

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- Video Game Designers Ron Gilbert (*The Secret of Monkey Island*), Ted Kosmatka (*Portal 2*), and Chet Faliszek (*Left 4 Dead*);
- Scientists/Nonfiction Writers, such as: Naomi Klein (*This Changes Everything*), P.W. Singer (*Wired for War*), Paul Krugman (*New York Times* columnist/economist), Mary Roach (*Stiff*), Brian Greene (*Fabric of the Cosmos*), Neil deGrasse Tyson (*Nova scienceNOW*), and Richard Dawkins (*The God Delusion*).

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more.



OTHER APOCALYPTIC BOOKS

BY JOHN JOSEPH ADAMS

In addition to the three books in [THE APOCALYPSE TRIPTYCH](#), editor John Joseph Adams has also edited several other anthologies of a similar thematic nature that you might enjoy:

WASTELANDS: STORIES OF THE APOCALYPSE

edited by John Joseph Adams
Night Shade Books, January 2008

From the Book of Revelation to *The Road Warrior*; from *A Canticle for Leibowitz* to *The Road*, storytellers have long imagined the end of the world, weaving eschatological tales of catastrophe, chaos, and calamity. In doing so, these visionary authors have addressed one of the most challenging and enduring themes of imaginative fiction: the nature of life in the aftermath of total societal collapse.

Gathering together the best post-apocalyptic literature of the last two decades from many of today's most renowned authors of speculative fiction — including George R.R. Martin, Gene Wolfe, Orson Scott Card, Carol Emshwiller, Jonathan Lethem, Octavia E. Butler, and Stephen King — *Wastelands* explores the scientific, psychological, and philosophical questions of what it means to remain human in

the wake of Armageddon.

johnjosephadams.com/wastelands

**WASTELANDS 2: MORE STORIES OF THE
APOCALYPSE**

edited by John Joseph Adams

Titan Books, February 2015

For decades, the apocalypse and its aftermath have yielded some of the most exciting short stories of all time. From David Brin’s seminal “The Postman” to Hugh Howey’s “Deep Blood Kettle” and Tananarive Due’s prescient “Patient Zero,” the end of the world continues to thrill. This companion volume to the critically-acclaimed *Wastelands* offers thirty of the finest examples of post-apocalyptic short fiction, including works by George R.R. Martin, Junot Díaz, Seanan McGuire, Paolo Bacigalupi, and more. Award-winning editor John Joseph Adams has once again assembled a who’s who of short fiction, and the result is nothing short of mind-blowing.

johnjosephadams.com/wastelands-2

THE LIVING DEAD

edited by John Joseph Adams

Night Shade Books, September 2008

From *White Zombie* to *Dawn of the Dead*, from *Resident Evil* to *World War Z*, zombies have invaded popular culture, becoming the monsters that best express the fears and anxieties of the modern west. The ultimate consumers, zombies rise from the dead and feed upon the living, their teeming masses ever hungry, ever seeking to devour or convert, like mindless, faceless eating machines. Zombies have been depicted as mind-controlled minions, the shambling infected, the disintegrating dead, the ultimate *lumpenproletariat*, but in all cases, they reflect us, mere mortals afraid of death in a society on the verge of collapse.

Gathering together the best zombie literature of the last three decades from many of today's most renowned authors of fantasy, speculative fiction, and horror, including Stephen King, Harlan Ellison[®], Robert Silverberg, George R. R. Martin, Clive Barker, Poppy Z. Brite, Neil Gaiman, Joe Hill, Laurell K. Hamilton, and Joe R. Lansdale, *The Living Dead*, covers the broad spectrum of zombie fiction, ranging from Romero-style zombies to reanimated corpses to voodoo zombies and beyond.

johnjosephadams.com/the-living-dead

THE LIVING DEAD 2
edited by John Joseph Adams

Night Shade Books, September 2010

Readers eagerly devoured *The Living Dead*. Now acclaimed editor John Joseph Adams is back for another bite at the apple — the Adam’s apple, that is — with 43 more of the best, most chilling, most thrilling zombie stories anywhere, including virtuoso performances by zombie fiction legends Max Brooks (*World War Z*, *The Zombie Survival Guide*), Robert Kirkman (*The Walking Dead*), and David Wellington (*Monster Island*).

From *Left 4 Dead* to *Zombieland* to *Pride and Prejudice and Zombies*, ghoulishness has never been more exciting and relevant. Within these pages samurai warriors face off against the legions of hell, necrotic dinosaurs haunt a mysterious lost world, and eerily clever zombies organize their mindless brethren into a terrifying army.

The Living Dead 2 has more of what zombie fans hunger for — more scares, more action, more. . . brains. Experience the indispensable series that defines the very best in zombie literature.

johnjosephadams.com/the-living-dead-2

ROBOT UPRISINGS

edited by Daniel H. Wilson & John Joseph Adams

Vintage Books, April 2014

As real robots creep into our lives, so does a sense of fear — we have all wondered what horrifying scenarios might unfold if our technology were to go awry. The idea of a robot uprising is fascinating precisely because it is possible. This anthology will bring to life the answers to our half-formed questions by providing a collection of meticulously precise, exhilarating trips into a future in which humans survive only by being more clever and tenacious than the machines they have created.

At the helm of this project are Daniel H. Wilson—bestselling novelist and expert in robotics—and John Joseph Adams—bestselling editor of more than a dozen science fiction/fantasy anthologies. Together, they have drawn on their wide-ranging contacts to assemble a talented group of authors eager to attack the topic of robot uprisings from startling and fascinating angles.

Featuring work by Hugh Howey, Seanan McGuire, Scott Sigler, Charles Yu, Anna North, Robin Wasserman, Ernest Cline, Jeff Abbott, Julianna Baggott, and many more, plus a new novella from Daniel H. Wilson.

johnjosephadams.com/robot-uprisings

BRAVE NEW WORLDS
edited by John Joseph Adams
Night Shade Books, January 2011

You are being watched.

When the government wields its power against its own people, every citizen becomes an enemy of the state. Will you fight the system, or be ground to dust beneath the boot of tyranny?

In his smash-hit anthologies *Wastelands* and *The Living Dead*, acclaimed editor John Joseph Adams showed you what happens when society is utterly wiped away. Now he brings you a glimpse into an equally terrifying future — what happens when civilization invades and dictates every aspect of your life?

From *1984* to *The Handmaid's Tale*, from *Children of Men* to *Bioshock*, the dystopian imagination has been a vital and gripping cautionary force. *Brave New Worlds* collects 33 of the best tales of totalitarian menace by some of today's most visionary writers.

johnjosephadams.com/brave-new-worlds

LOOSED UPON THE WORLD

edited by John Joseph Adams

Saga Press, August 2015

An anthology of fiction about climate change, featuring stories by Margaret Atwood, Paolo Bacigalupi, Seanan McGuire, Kim Stanley Robinson, Robert Silverberg, Charlie Jane Anders, Karl Schroeder, Nancy Kress, Tobias S.

Buckell, and many others.

johnjosephadams.com/loosed



OTHER BOOKS BY JOHN JOSEPH ADAMS YOU MIGHT BE INTERESTED IN

Based on your interest in Humble Bundle, here are two other books by John Joseph Adams you might enjoy:

PRESS START TO PLAY
edited by Daniel H. Wilson & John Joseph Adams
Vintage Books, August 2015

Video games have become a multi-billion dollar a year industry that has outpaced movies and books combined. The humble, pixelated games of the '70s and '80s have evolved into the vivid, realistic, and immersive form of entertainment that now rivals all other forms of media for dominance in the consumer marketplace. For many, video games have become *the* cultural icons around which the entire entertainment industry revolves.

So if exploring video games has become one of the primary ways we create and experience narratives, why not create some narratives that explore the way we create and experience video games?

In this book you will find twenty-five stories that recreate the feel of a video game in prose form, stories that play with the core concepts of video games, and stories about the creation or playing of video games themselves.

Featuring: original fiction from video game industry veterans such as Marc Laidlaw (*Half-Life*), Austin Grossman (*Dishonored*), Micky Neilson (*World of Warcraft*), Rhianna Pratchett (*Tomb Raider*), and Chris Avellone (*Fallout: New Vegas*); original fiction from new and notable writers of science fiction and fantasy, including Hiroshi Sakurazaka (*All You Need is Kill*, basis for the film *Edge of Tomorrow*), Seanan McGuire (*Half-Off Ragnarok*), Charles Yu (*How to Live Safely in a Science Fictional Universe*), Robin Wasserman (*The Waking Dark*), Andy Weir (*The Martian*) and Hugh Howey (*Wool*); plus, selected reprints by authors such as T.C. Boyle (*World's End*), Catherynne M. Valente (*Deathless*), Ken Liu (*The Grace of Kings*), Cory Doctorow (*Little Brother*), and others.

johnjosephadams.com/press-start

HELP FUND MY ROBOT ARMY!!! & OTHER IMPROBABLE CROWDFUNDING PROJECTS

edited by John Joseph Adams

Self-Published/Crowdfunded, July 2014

If you're a regular backer of Kickstarters, you've probably seen some unique crowdfunding projects in your time. But one thing all of those campaigns — boringly! — had in common was: They abided by the physical laws of the

universe!

HELP FUND MY ROBOT ARMY!!! is an anthology of science fiction and fantasy stories told in the form of fictional crowdfunding pitches, using the components (and restrictions) of the format to tell the story. This includes but is not limited to: Project Goals, Rewards, User Comments, Project Updates, FAQs, and more. The idea is to replicate the feel of reading a crowdfunding pitch, so that even though the projects may be preposterous in the real world, they will feel like authentic crowdfunding projects as much as possible.

So if what you've always been looking for in a Kickstarter — and couldn't find — was a project that allowed you to protect yourself from spoilers, buy wishes, find lost objects, or support a wildlife preserve for supernatural creatures, then *HELP FUND MY ROBOT ARMY!!! & Other Improbable Crowdfunding Projects* may be just the thing you've been looking for.

Featuring stories by: Tobias S. Buckell, Chuck Wendig, Tim Pratt, Veronica Belmont, Monte Cook, Michael J. Sullivan, David Malki!, Scott Sigler, Daniel H. Wilson, Seanan McGuire, and others.

johnjosephadams.com/robot-army

